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(21) International Application Number: PCT/US98/06954 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/835,913 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)		
(57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

FIELD OF THE INVENTION

5 The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

10 Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely
15 to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

20 Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST
25 library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-
30 secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted proteins,
5 namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide
5 comprising a nucleotide sequence selected from the group consisting of:
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10 NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;
or a complement of said sequence.

In other embodiments, the present invention provides an isolated polynucleotide
consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

20 In further embodiments, the present invention provides an isolated polynucleotide
consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group
30 consisting of:

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NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID
NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID
25 NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID
NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID
NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID
NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID
NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID
30 NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID
NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID
NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID

NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID
NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described
5 polynucleotides.

DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the
Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
10 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.)
followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

15	1	B11	21	C3	41	C639	61	D148
	2	B18	22	C32	42	C641	62	D154
	3	B21	23	C141	43	C642	63	D167
	4	B26	24	C143	44	C645	64	D179
	5	B40	25	C180	45	D4	65	D188
20	6	B115	26	C195	46	D7	66	D196
	7	B121	27	C293	47	D14	67	D200
	8	B124	28	C312	48	D15	68	D203
	9	B125	29	C539	49	D27	69	D233
	10	B142	30	C544	50	D68	70	D252
25	11	B196	31	C547	51	D69	71	D286
	12	B208	32	C571	52	D81	72	D303
	13	B224	33	C604	53	D100	73	D304
	14	B227	34	C607	54	D101	74	D305
	15	B232	35	C608	55	D104	75	D310
30	16	B236	36	C610	56	D105	76	D311
	17	B238	37	C617	57	D115	77	D318
	18	B255	38	C626	58	D121	78	D327
	19	C1	39	C627	59	D133	79	D329
	20	C2	40	C636	60	D143	80	E1

	81	E4	115	H291	149	J139	183	M141
	82	E5	116	H306	150	J143	184	M152
	83	E11	117	H383	151	J156	185	M194
	84	E12	118	H426	152	J168	186	M230
5	85	E14	119	H438	153	J297	187	M273
	86	E18	120	H541	154	J317	188	M292
	87	G1	121	H545	155	J322	189	M301
	88	G12	122	H657	156	J422	190	M313
	89	G16	123	H698	157	J435	191	M328
10	90	G20	124	H758	158	J509	192	M338
	91	G21	125	H770	159	J512	193	O7
	92	G26	126	H849	160	J532	194	O47
	93	G31	127	H920	161	J546	195	O67
	94	G40	128	H978	162	J598	196	O75
15	95	G46	129	H999	163	J635	197	O99
	96	G53	130	H1004	164	J638	198	O135
	97	G55	131	H1010	165	J708	199	O139
	98	G58	132	H1045	166	J731	200	O268
	99	G68	133	H1052	167	M4	201	O276
20	100	G85	134	H1075	168	M6	202	O289
	101	G86	135	H1096	169	M43	203	O338
	102	G99	136	H1116	170	M60	204	O349
	103	G103	137	H1165	171	M68	205	O351
	104	G107	138	H1301	172	M71	206	O372
25	105	G108	139	H1408	173	M88	207	O386
	106	G112	140	H1413	174	M97	208	O417
	107	G114	141	H1456	175	M100	209	O418
	108	H45	142	I5	176	M114	210	O463
	109	H162	143	I28	177	M120	211	S10
30	110	H165	144	I32	178	M121	212	S34
	111	H171	145	J5	179	M125	213	S70
	112	H174	146	J54	180	M126	214	S169
	113	H225	147	J66	181	M128	215	S185
	114	H236	148	J135	182	M137	216	S195

	217	AA20	251	AJ6	285	AM72	319	AP137
	218	AA35	252	AJ8	286	AM93	320	AP76
	219	AB10	253	AJ52	287	AK679	321	AP87
	220	AA240	254	AJ53	288	AK684	322	AP90
5	221	AA244	255	AJ54	289	AK699	323	AP150
	222	AA246	256	AJ78	290	AM155	324	AP159
	223	AA287	257	AJ80	291	AM167	325	AP160
	224	AA299	258	AK368	292	AM207	326	AP162
	225	AA318	259	AJ127	293	AM217	327	AP168
10	226	AB45	260	AJ142	294	AM224	328	AP179
	227	AA36	261	AJ143	295	AM226	329	AP197
	228	AA363	262	AC339	296	AM235	330	AP215
	229	AA365	263	AC370	297	AM259	331	AP224
	230	AA351	264	AL14	298	AM266	332	AP226
15	231	AB290	265	AK401	299	AM267	333	AP242
	232	AC41	266	AK438	300	AM277	334	AP250
	233	AC18	267	AK583	301	AM279	335	AQ11
	234	AC175	268	AK585	302	AC387	336	AQ2
	235	AC114	269	AK598	303	AC395	337	AQ21
20	236	AC111	270	AK604	304	AC410	338	AQ23
	237	AC100	271	AK609	305	AC412	339	AQ3
	238	AC222	272	AK620	306	AC423	340	AQ34
	239	AC325	273	AM10	307	AJ146	341	AQ5
	240	AI44	274	AM104	308	AJ147	342	AR15
25	241	AI6	275	AM123	309	AJ156	343	AR22
	242	AI86	276	AM137	310	AJ168	344	AR28
	243	AJ1	277	AM15	311	AJ169	345	AR3
	244	AJ10	278	AM16	312	AJ172	346	AR34
	245	AJ13	279	AM30	313	AJ173	347	AR42
30	246	AJ15	280	AM38	314	AJ174	348	AR54
	247	AJ20	281	AM39	315	AK528	349	AR61
	248	AJ21	282	AM42	316	AP116	350	AM282
	249	AJ26	283	AM46	317	AP120	351	AM307
	250	AJ27	284	AM66	318	AP135	352	AM349

	353	AM372	387	AR310	421	AM616	455	AM921
	354	AM392	388	AR323	422	AM622	456	AM931
	355	AM400	389	AR324	423	AM625	457	AM973
	356	AM430	390	AR325	424	AM666	458	AM996
5	357	AP11	391	AR349	425	AM686	459	AS56
	358	AP2	392	AR360	426	AM704	460	AS61
	359	AP56	393	AR364	427	AM726	461	AS63
	360	AP57	394	AR400	428	AM728	462	AS65
	361	AP58	395	AR415	429	AM735	463	AS83
10	362	AP60	396	AR417	430	AM741	464	AS85
	363	AP67	397	AM558	431	AM742	465	AS86
	364	AP7	398	AM566	432	AM754	466	AS88
	365	AQ53	399	AM600	433	AM781	467	AT107
	366	AQ54	400	AR420	434	AM795	468	AT111
15	367	AQ61	401	AR437	435	AM814	469	AT138
	368	AQ64	402	AR440	436	AM833	470	AT140
	369	AQ71	403	AR446	437	AM838	471	AT142
	370	AQ73	404	AR450	438	AT16	472	AT146
	371	AQ83	405	AR452	439	AT19	473	AT151
20	372	AM1075	406	AR455	440	AT20	474	AT157
	373	AM1076	407	AR463	441	AT4	475	AT181
	374	AM1083	408	AR464	442	AT53	476	AT97
	375	AR100	409	AR467	443	AT63	477	AS239
	376	AR69	410	AR474	444	AT64	478	AT226
25	377	AM1017	411	AR475	445	AT74	479	AT259
	378	AM1032	412	AS15	446	AT94	480	AT260
	379	AM1036	413	AS20	447	AT95	481	AT265
	380	AM1045	414	AS23	448	AM1000	482	AT280
	381	AM1060	415	AS31	449	AM856	483	AT340
30	382	AM1067	416	AS47	450	AM885	484	AT351
	383	AR253	417	AS48	451	AM889	485	AT352
	384	AK642	418	AS7	452	AM892	486	AT356
	385	AK647	419	AM610	453	AM910	487	AT359
	386	AK650	420	AM614	454	AM918	488	AT361

	489	AS252	523	AU161	557	AW106	591	BE28
	490	AS263	524	AU164	558	AW107	592	BE3
	491	AS264	525	AZ285	559	AW109	593	BE34
	492	AS268	526	AZ286	560	AW133	594	BE9
5	493	AS271	527	AZ287	561	AW140	595	AZ12
	494	AS294	528	AZ290	562	AW92	596	AZ22
	495	AS301	529	AZ188	563	AW95	597	AZ32
	496	AS330	530	AZ191	564	AW98	598	AZ45
	497	AS144	531	AZ204	565	BA185	599	AZ46
10	498	AS152	532	AZ219	566	BA204	600	BF143
	499	AS157	533	AW170	567	BA210	601	BF146
	500	AS162	534	AW176	568	BA226	602	BF157
	501	AS164	535	AW178	569	BG1	603	BF160
	502	AS167	536	AW179	570	BG13	604	BF169
15	503	AS180	537	AW182	571	BG3	605	BF171
	504	AS186	538	AW185	572	BG33	606	BF176
	505	AS187	539	AW189	573	BG36	607	BF178
	506	AU36	540	AW192	574	BG37	608	AS196
	507	AU39	541	AW194	575	BG40	609	AS202
20	508	AU43	542	AW199	576	BG43	610	AS209
	509	AU47	543	AW222	577	BG48	611	AS216
	510	AU50	544	AW231	578	BG58	612	AS230
	511	AU59	545	AZ261	579	BG72	613	AS232
	512	AU71	546	AZ264	580	BG73	614	AX101
25	513	AU101	547	AZ302	581	BF101	615	AX104
	514	AU102	548	AZ303	582	BF132	616	AX107
	515	AU105	549	AK649	583	AZ69	617	AX109
	516	AU106	550	AK663	584	BD51	618	AX122
	517	AU107	551	AR336	585	BD53	619	AX124
30	518	AU115	552	AR356	586	BD65	620	AX127
	519	AU118	553	AR398	587	BD66	621	AX128
	520	AU122	554	AR399	588	BD73	622	AX130
	521	AU138	555	AM1016	589	BD77	623	AX132
	522	AU139	556	AW105	590	BD80	624	AX136

	625	AX137	659	BG274	693	AW33	727	BG504
	626	AX143	660	BG276	694	AW36	728	BG510
	627	AX146	661	AX12	695	AW47	729	BG511
	628	AX51	662	AX17	696	AW49	730	BG513
5	629	AX55	663	AX256	697	AW52	731	BG516
	630	AX56	664	AX30	698	AW60	732	BG518
	631	AX60	665	AX32	699	AW66	733	BG526
	632	AX65	666	AX34	700	AW76	734	BG528
	633	AX78	667	AX49	701	AY241	735	BG552
10	634	AX80	668	AX6	702	AY259	736	BG553
	635	AX81	669	AX8	703	AY268	737	BG556
	636	AX92	670	AZ180	704	BA123	738	AX309
	637	AX97	671	BG191	705	BA134	739	AX315
	638	AX98	672	BG193	706	BA170	740	AX318
15	639	AX99	673	BG199	707	BA176	741	AY186
	640	AZ109	674	BG201	708	BA178	742	AY190
	641	AZ114	675	BG219	709	BA179	743	AY200
	642	BF286	676	BG220	710	BA216	744	AY208
	643	BF290	677	BG221	711	BA233	745	AY211
20	644	BF314	678	BG225	712	BD372	746	AY283
	645	BG236	679	BG228	713	BD375	747	AY289
	646	BG237	680	BG442	714	BD379	748	AY304
	647	BG240	681	BG449	715	BD380	749	AY307
	648	BG241	682	BG457	716	BD403	750	AY318
25	649	BG248	683	BG458	717	BD407	751	AY333
	650	BG249	684	BG461	718	BD409	752	AY334
	651	BG250	685	BG465	719	BD413	753	AY342
	652	BG251	686	BG467	720	BD414	754	AY358
	653	BG255	687	BG471	721	BG481	755	AY362
30	654	BG260	688	BG59	722	BG482	756	BF190
	655	BG267	689	AW12	723	BG492	757	BF191
	656	BG271	690	AW22	724	BG494	758	BF193
	657	BG272	691	AW24	725	BG495	759	BF197
	658	BG273	692	AW32	726	BG503	760	BF208

	761	BF211	795	BG373	829	BD174	863	BI17
	762	BF216	796	BG374	830	BD176	864	BI2
	763	BF221	797	BG379	831	BD177	865	BI24
	764	BF227	798	BG386	832	BD178	866	BI25
5	765	BF228	799	BG388	833	BD183	867	BI3
	766	BF245	800	BG389	834	BE50	868	BI36
	767	BF250	801	BG391	835	BE64	869	BI37
	768	BF258	802	BG393	836	BE89	870	BI39
	769	BF259	803	BG396	837	BG490	871	BI40
10	770	BF263	804	BG409	838	BG491	872	BI41
	771	BF270	805	BG411	839	BG501	873	BI46
	772	BF273	806	BG414	840	BG502	874	BM1
	773	BG280	807	BG420	841	BG512	875	BM17
	774	BG283	808	HW105	842	BG532	876	BM4
15	775	BG284	809	BB54	843	BK162	877	BM41
	776	BG288	810	BD101	844	BK165	878	BM46
	777	BG296	811	BD104	845	BK167	879	BM69
	778	BG305	812	BD107	846	BK171	880	BM88
	779	BG306	813	BD109	847	BK179	881	BM90
20	780	BG309	814	BD119	848	BK180	882	BA106
	781	BG324	815	BD121	849	BK183	883	BA12
	782	BG327	816	BD127	850	BK186	884	BA32
	783	BG329	817	BD128	851	BK194	885	BA38
	784	BG332	818	BD132	852	BK200	886	BA40
25	785	BG334	819	BD136	853	BK206	887	BA71
	786	BG335	820	BD137	854	BK216	888	BA79
	787	BG350	821	BD140	855	BK231	889	BA8
	788	BG356	822	BD144	856	BK232	890	BA88
	789	BG357	823	BD151	857	BK236	891	BA90
30	790	BG363	824	BD154	858	BK237	892	BA91
	791	BG365	825	BD164	859	BK241	893	BA98
	792	BG366	826	BD165	860	BK243	894	BK15
	793	BG368	827	BD169	861	BK246	895	BK17
	794	BG372	828	BD170	862	BK253	896	BK24

	897	BK257	931	AY428	965	BK146	999	BG139
	898	BK26	932	AY437	966	BK155	1000	BG140
	899	BK260	933	AY440	967	BK158	1001	BG141
	900	BK265	934	AY442	968	BK75	1002	BG142
5	901	BK270	935	AY449	969	BK78	1003	BG145
	902	BK271	936	AY457	970	BK92	1004	BG148
	903	BK280	937	AY470	971	BK93	1005	BG151
	904	BK284	938	AY487	972	BK95	1006	BG156
	905	BK286	939	AY489	973	BK96	1007	BG158
10	906	BK29	940	AY511	974	BM101	1008	BG160
	907	BK291	941	BE153	975	BM117	1009	BG168
	908	BK295	942	BF327	976	BM124	1010	BG170
	909	BK296	943	BI64	977	BM139	1011	BG171
	910	BK299	944	BI66	978	BM154	1012	BG172
15	911	BK304	945	BI75	979	BM155	1013	BG173
	912	BK307	946	BI80	980	BM158	1014	BG93
	913	BK308	947	BI81	981	BM94	1015	BG95
	914	BK339	948	BI82	982	AY102	1016	BI102
	915	BK34	949	BI86	983	AY107	1017	BI103
20	916	BK343	950	BI87	984	AY122	1018	BI107
	917	BK40	951	BI88	985	AY131	1019	BI110
	918	BK41	952	BI91	986	AY137	1020	BI114
	919	BK48	953	BI92	987	AY140	1021	BI117
	920	BK49	954	BK102	988	AY147	1022	BI120
25	921	BK57	955	BK105	989	AY157	1023	BI122
	922	BK59	956	BK107	990	AY160	1024	BI124
	923	BK61	957	BK112	991	AY183	1025	BI126
	924	BK68	958	BK114	992	AY93	1026	BI127
	925	BL341	959	BK115	993	BG102	1027	BI129
30	926	AY398	960	BK117	994	BG104	1028	BI133
	927	AY406	961	BK120	995	BG112	1029	BI139
	928	AY407	962	BK130	996	BG125	1030	BI150
	929	AY408	963	BK134	997	BG132	1031	BI164
	930	AY421	964	BK142	998	BG137	1032	BI97

	1033	BI98	1067	BQ58	1101	BO71	1135	BL209
	1034	BI99	1068	BD189	1102	BO87	1136	BL210
	1035	BS1	1069	BD194	1103	BO9	1137	BL211
	1036	BS54	1070	BD199	1104	BD235	1138	BL219
5	1037	BS58	1071	BD200	1105	BD240	1139	BL220
	1038	BS81	1072	BD201	1106	BD241	1140	BL229
	1039	BS89	1073	BD208	1107	BD244	1141	BL230
	1040	BH100	1074	BD209	1108	BD247	1142	BL243
	1041	BH106	1075	BD213	1109	BD251	1143	BL247
10	1042	BH111	1076	BD214	1110	BD257	1144	BL249
	1043	BH123	1077	BD222	1111	BD260	1145	BL255
	1044	BH131	1078	BH19	1112	BD262	1146	BL257
	1045	BH157	1079	BH195	1113	BD265	1147	BL271
	1046	BH297	1080	BH2	1114	BD268	1148	BL274
15	1047	BH306	1081	BH227	1115	BD522	1149	BL30
	1048	BH309	1082	BH272	1116	BD538	1150	BL67
	1049	BH316	1083	BH276	1117	BD544	1151	BL73
	1050	BH323	1084	BH281	1118	BD548	1152	BL89
	1051	BH339	1085	BH41	1119	BD561	1153	BD420
20	1052	BH365	1086	BH51	1120	BL147	1154	BD423
	1053	BH389	1087	BH66	1121	BL15	1155	BD426
	1054	BH392	1088	BH7	1122	BL152	1156	BD427
	1055	BJ54	1089	BH87	1123	BL156	1157	BD428
	1056	BJ62	1090	BH90	1124	BL160	1158	BD438
25	1057	BJ66	1091	BJ20	1125	BL178	1159	BD441
	1058	BJ67	1092	BJ27	1126	BL179	1160	BD445
	1059	BJ69	1093	BJ29	1127	BL183	1161	BD473
	1060	BJ70	1094	BJ38	1128	BL185	1162	BD486
	1061	BJ75	1095	BJ39	1129	BL186	1163	BD489
30	1062	BJ76	1096	BJ9	1130	BL187	1164	BD492
	1063	BJ78	1097	BO11	1131	BL194	1165	BD512
	1064	BJ87	1098	BO20	1132	BL196	1166	BL106
	1065	BQ20	1099	BO4	1133	BL201	1167	BL310
	1066	BQ3	1100	BO52	1134	BL205	1168	BN1

	1169	BN107	1203	BD351	1237	BN351	1271	BP22
	1170	BN12	1204	BN189	1238	BN354	1272	BP24
	1171	BN130	1205	BN201	1239	BN365	1273	BP25
	1172	BN132	1206	BN212	1240	BN422	1274	BT99
5	1173	BN133	1207	BN280	1241	BN425	1275	BP28
	1174	BN139	1208	BN284	1242	BN439	1276	BP3
	1175	BN141	1209	BN329	1243	BN460	1277	BP4
	1176	BN153	1210	BN331	1244	BN461	1278	BP43
	1177	BN156	1211	BN591	1245	BN463	1279	BP47
10	1178	BN171	1212	BO153	1246	BN472	1280	BP504
	1179	BN174	1213	BO157	1247	BN473	1281	BP506
	1180	BN180	1214	BO159	1248	BO100	1282	BP508
	1181	BN246	1215	BO166	1249	BO107	1283	BP521
	1182	BN267	1216	BO178	1250	BO114	1284	BP528
15	1183	BN268	1217	BO189	1251	BO121	1285	BP530
	1184	BN33	1218	BO194	1252	BO126	1286	BP532
	1185	BN40	1219	BO210	1253	BO133	1287	BP537
	1186	BN48	1220	BO212	1254	BO137	1288	BP544
	1187	BN5	1221	BO213	1255	BO398	1289	BP545
20	1188	BN563	1222	BO218	1256	BO399	1290	BP55
	1189	BN65	1223	BO226	1257	BO401	1291	BP567
	1190	BN69	1224	BO279	1258	BO432	1292	BP569
	1191	BN81	1225	BO301	1259	BO528	1293	BP57
	1192	BN97	1226	BO323	1260	BO535	1294	BP590
25	1193	BN99	1227	BO358	1261	BO538	1295	BP61
	1194	BD286	1228	BO365	1262	BO549	1296	BP70
	1195	BD288	1229	BO385	1263	BO551	1297	BP71
	1196	BD297	1230	BO250	1264	BO93	1298	BP780
	1197	BD316	1231	BO254	1265	BP101	1299	BP783
30	1198	BD317	1232	BO256	1266	BP118	1300	BP784
	1199	BD321	1233	BO260	1267	BP121	1301	BP791
	1200	BD327	1234	BO261	1268	BP15	1302	BP797
	1201	BD335	1235	BO273	1269	BP19	1303	BP806
	1202	BD339	1236	BN342	1270	BP21	1304	BP809

	1305	BP810	1339	BV243	1373	CC71	1407	BR572
	1306	BP813	1340	BV248	1374	CC76	1408	BR559
	1307	BP814	1341	BV250	1375	CC78	1409	BR538
	1308	BP815	1342	BV259	1376	CC81	1410	BR537
5	1309	BP820	1343	BV273	1377	CC89	1411	BR533
	1310	BP84	1344	BV275	1378	CD124	1412	BR500
	1311	BP919	1345	BV49	1379	CD128	1413	BR48
	1312	BP925	1346	BV51	1380	CD140	1414	BR475
	1313	BQ115	1347	BV66	1381	CD145	1415	BR436
10	1314	BQ129	1348	BV70	1382	CD146	1416	BR434
	1315	BS116	1349	BV71	1383	CD173	1417	BR4
	1316	BT101	1350	BV72	1384	CD194	1418	BR346
	1317	BT133	1351	BV73	1385	CD31	1419	BR342
	1318	BT139	1352	BV88	1386	CD50	1420	BR338
15	1319	BT33	1353	BW345	1387	CF50	1421	BR333
	1320	BT4	1354	CB25	1388	CF62	1422	BR332
	1321	BW13	1355	CB3	1389	CF78	1423	BR212
	1322	BW18	1356	CB30	1390	CF85	1424	BR195
	1323	BW2	1357	CB37	1391	CF89	1425	BR194
20	1324	BW51	1358	CC144	1392	BR814	1426	BR19
	1325	BW61	1359	CC145	1393	BR782	1427	BR141
	1326	BW83	1360	CC149	1394	BR778	1428	BR122
	1327	BV185	1361	CC153	1395	BR77	1429	BR107
	1328	BV195	1362	CC162	1396	BR767	1430	BR1010
25	1329	BV200	1363	CC25	1397	BR758	1431	BR101
	1330	BV202	1364	CC31	1398	BR733	1432	BR1008
	1331	BV204	1365	CC322	1399	BR719	1433	BQ135
	1332	BV206	1366	CC39	1400	BR711	1434	BP913
	1333	BV210	1367	CC397	1401	BR71	1435	BP911
30	1334	BV212	1368	CC403	1402	BR63	1436	BP897
	1335	BV227	1369	CC46	1403	BR616	1437	BP895
	1336	BV238	1370	CC50	1404	BR610	1438	BP894
	1337	BV239	1371	CC59	1405	BR607	1439	BP893
	1338	BV241	1372	CC69	1406	BR595	1440	BP884

	1441	BP883	1475	BU65
	1442	BP875	1476	BU68
	1443	BP870	1477	BU76
	1444	BP859	1478	BV106
5	1445	BP837	1479	BV112
	1446	BP833	1480	BV123
	1447	BP499	1481	BV124
	1448	BP492	1482	BV126
	1449	BP488	1483	BV128
10	1450	BP484	1484	BV131
	1451	BP483	1485	BV133
	1452	BP481	1486	BV134
	1453	BP475	1487	BV135
	1454	BN418	1488	BV138
15	1455	BN415	1489	BV139
	1456	BN405	1490	BV140
	1457	BN394	1491	BV141
	1458	BN390	1492	BV145
	1459	BN387	1493	BV15
20	1460	BN379	1494	BV158
	1461	BN377	1495	BV160
	1462	BR84	1496	BV172
	1463	BR853	1497	BV180
	1464	BR854	1498	BV21
25	1465	BR884	1499	BV27
	1466	BT160	1500	BV29
	1467	BU165		
	1468	BU29		
	1469	BU44		
30	1470	BU45		
	1471	BU53		
	1472	BU57		
	1473	BU6		
	1474	BU60		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selectin "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

‡: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

†: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The isolated polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from in vitro culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting
30 expressed protein may then be purified from such culture (i.e., from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which
5 will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently
10 purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or
15 all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic
20 animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are
25 known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological
30 processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTL2, TF-1, Mo7e and CMK.

10 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

20 Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

30 Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection
5 or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses
10 would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected
5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured
10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-
15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa
20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching
25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al. Eur. J. Immunol. 25: 1744-1748; Gruber et al.
30 J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborget et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the

5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent

10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for

15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides,
10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,
20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a
25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either
30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

(1) GENERAL INFORMATION:

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- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1500
- (iv) CORRESPONDENCE ADDRESS
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- (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy Disk
(B) COMPUTER: IBM PC Compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER:
(B) FILING DATE:
(C) CLASSIFICATION:
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(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 335 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GTCGACCCCA	TCCCATCCAA	TAGTCCCCAT	CTCTTCTCAG	CTCTCTCTGT	AGTTTCTCTT	60
CCTCCGCCTG	CCTTTTAAGT	TAGTGTTTCC	CAGGACAGAG	GTGACTCAGT	TGTATCCAGA	120
CCGCTCTGTG	ACTGAACACC	CACTTTCTTT	TCCTTTTCCA	ATAAATATAT	GTAACATACA	180
TGTCAACTAG	GAACAAAACA	GTATCTCAGG	AATCCACCAT	CCAGTTAAAA	ATGGACCCTT	240

ACCCTTACCG TGCCCCTGCA GAGACCCCAA TACAGCGCAT TTCCCTCATT CTTTGTCTT 300
TCTCAAGTTT TACCACGGCC TCTTTGGCCC TCGAG 335

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 514 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTCGGCC AAAGAGGCCG TTGACCATTG ATAGAACACA GGCATACACA GGAAGATACA 60
 TTCACAGAAG AGCTTCCTGC ACAAAGTAAG CCACCAGCGC AACATGACAG TGAAGACCCT 120
 GCATGGCCCA GCCATGGTCA AGTACTTGCT GCTGTTCGATA TTGGGGCTTG CCTTCTGAG 180
 TGAGGCGGCA GCTCGGAAA TCCCCAAAGT AGGACATACT TTTTCCAAA AGCCTGAGAG 240
 TTGCCCGCCT GTGCCAGGAG GTAGTATGAA GCTTGACATT GGCATCATCA ATGAAAACCA 300
 GCGCGTTTCC ATGTCACGTA ACATCGAGAG CCGCTCCACC TCCCCCTGGA ATTACACTGT 360
 CACTTGGGAC CCCAACCGGT ACCCCTCGGA AGTTGTACAG GCCAGTGTGA GGAAGTTGGG 420
 CTGCATCAAT GCTCAAGGAA AGGAAGACAT CTCCATGAAT TCCGTTCCCA TCCAGCAAGA 480
 GACCCTGTCTG ACGCCTCTT TGGCCCTCGA GACA 514

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GTCGACCCTC CACCTGCAAA TCCACTGTCC ATACCCTTGG ATTGGTTGAA GAGCCTTTGG 60
 TCATACTGAA CTTCAATTGGA AGTCCGAGGA TTAGGAACAC CGAGAGCAAT AACTTCACTG 120
 ATATCCCGAT TTTCAATTTCT CTGAAGTTTC GACCTCTTAT CAGGAGCTGC CCTGGAAAGA 180
 TTCCGTCAT GCTGTCTCTC TTTTCGCCTG TCATGCCGGA TTTCATCCCT CTCACGTGCC 240
 TCCCCATCCT CTTTTTCCAC ATGAGTTTTG ATCCCAGCTC TTCTCTCCCT GGCTTTCTGG 300
 GCCATTTCTC TAAGTTTCTC TNCANGTNTN NCCTTTTCTT TCTGAGCCAT TTTTCTCTCT 360
 ACTTGGGCGT CGACGGCTC TGGGGCCCTC GAG 393

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 564 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GTCGACCAGG CATAACAGG AAGATACATT CACAGAAAGA GCTTCCTGCA CAAAGTAAGC 60
 CACCAGCGCA ACATGACAGT GAAGACCCTG CATGGCCCGAG CCATGGTCAA GTACTTGCTG 120

CTGTCGATAT	TGGGGCTTGC	CTTTCTGAGT	GAGGCGGCAG	CTCGGAAAAT	CCCCAAAGTA	180
GGACATACTT	TTTTCCAAAA	GCCTGAGAGT	TGCCCCGCTG	TGCCAGGAGG	TAGTATGAAG	240
CTTGACATTG	GCATCATCAA	TGAAAACCCAG	CGCGTTTCCA	TGTCACGTAA	CATCGAGAGC	300
CGCTCCACCT	CCCCCTGGAA	TTACACTGTC	ACTTGGGACC	CCAACCGGTA	CCCCTCGGAA	360
GTTGTACAGG	CCCAGTGTAG	GAACCTGGGC	TGCATCAATG	CTCAAGGAAA	GGAAGACATC	420
TCCATGAATT	CCGTTCCCAT	CCAGCAAGAG	ACCCTGGTCG	TCCGGAGGAA	GCACCAAGGC	480
TGCTCTGTTT	CTTTCCAGTT	GGAGAAGGTG	CTGGTGACTG	TTGGCTGCAC	CTGCGTCACG	540
TCAACGGCCT	CTTTGGCCCT	CGAG				564

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GTCGACCTTC	AGTTGCCTCA	GACCCAGTA	ATACAACGGT	CACCACCATG	AAACCTACAG	60
CGGCATCTAA	TACAACAACA	CCAGGGATGG	TCTCAACAAA	TATGACTTCT	ACCACCTTAA	120
AGTCTACACC	CAAAACAACA	AGTGTTTCAC	AGAACACATC	TCAGATATCA	ACATCCACAA	180
TGACCGTAAC	CCACAATAGT	TCAGTGACAT	CTGCTGCTTC	ATCAGTAACA	ATCACAACAA	240
CTATGCATTC	TGAAGCAAAG	AAAGGATCAA	AATTTGATAC	TGGGAGCTTT	GTTGGTGATA	300
TTGTATTAAAC	GCTGGGAGTT	TTATCTATTC	TGTCAACGGC	CTCTTTGGCC	CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GTACTGCTGC	ACGGACTCTG	GAACCATGAA	CATATTTGAT	CGAAAGATCA	ACTTTGATGC	60
GCTTTTAAAA	TTTTCTCATA	TAACCCCGTC	AACGCAGCAG	CACCTGAAGA	AGGTCTATGC	120
AAGTTTGGCC	CTTTGTATGT	TTGCGGCGGC	TGCAGGGGCC	TATGTCCATA	TGGTCACTCA	180
TTTCATTGAG	GCTGGCCTGC	TGTCTGCCTT	GGGCTCCCTG	ATATTGATGA	TTTGGCTGAT	240
GGCAACACCT	CATAGCCATG	AAACTGAACA	GAAAAGACTG	GGACTTCTTG	CTGGATTGTC	300
ATTCCTTACA	GGAGTTGGCC	TGGGCCCTGC	CCTGGAGTTT	TGTATTGCTG	TCAACCCCGAG	360
CATCCTTCCC	ACTGCTTTCA	TGGGCACGGC	AATGATCTTT	ACCTGCTTCA	CCCTCAGTGC	420
ACTCTATGCC	AGGCGCCGCG	GCTACCTCTT	TCTGGGAGGT	ATCTTGATGT	CAGCCCTGAG	480
CTTGTTGCTT	TTGTGACGG	CCTCTTTGGC	CCTCGAGACA			520

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GTCGACGTAC	CACCAGCAAC	CATCAATCCC	GTCTCCTCCT	GCCTCCTCTC	CTGCAATCCA	60
CCCCGCCACG	ACTATCGCCA	TGGCAGCCCT	GATCGCAGAG	AACTTCCGCT	TCCTGTCACT	120
TTTCTTCAAG	AGCAAGGATG	TGATGATTTT	CAACGGCCTG	GTGGCACTGG	GCACGGTGGG	180
CAGCCAGGAG	CTGTCCTCTG	TGGTGGCCTT	CCACTGCCCC	TGCTCGCCGG	CCCGGAAC TA	240
CCTGTACGGG	CTGGCGGCCA	TCGGCGTGCC	CGCCCTGGTG	CTCTTCATCA	TTGGCATCAT	300
CCTCAACAAC	CACACCTGGA	ACCTCGTGGG	CGAGTGCCAG	CACCGGAGGA	CCAAGA ACTG	360
CTCCGCCGCC	CCCACCTTCC	TCCTTCTAAG	CTCCATCCTG	GGACGTGCGG	CTGTGGCCCC	420
TGTCACCTGG	TCTGTCATCT	CCCTGCTGCG	TGGTGAGGCT	TATGTCTGTG	CTCTCAGTGA	480
GTTCTGTGGAC	CCTTCCTCAC	TCACGGCCTC	TTTGGCCCTC	GAGACA		526

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GTCAMCTGTG	CAGCGGAGTT	TGACTTTATG	GAAAAAGAGA	CTCCACTGAG	ATACACAAAG	60
ACATTATTGC	TTCCAGTTGT	TCTTGTAGTG	TTTGTTGCTA	TTGTTAGAAA	GATTATTAGT	120
GATATGTGGG	GTGTCTTAGC	TAAACAACAG	ACACATGTAA	GAAAAACACCA	GTTTGATCAT	180
GGAGAGCTGG	TTTACCATGC	ATTGCAATTG	TTAGCATATA	CAGCCCTTGG	TATTTTAAAT	240
ATGAGACTAA	AACTCTTCTT	GACACCATAC	ATGTGTGTTA	TGGCATCACT	GATCTGCTCA	300
AGACAGCTAT	TTGGATGGCT	CTTTGCAAAA	GTACATCCTG	GTGCTATTGT	GTTTGTTATA	360
TTAGCAGCAA	TGTCAATACA	AGGTTTCAGCA	AATCTGCAAA	CCCAGTGGAA	GTCGACGGCC	420
TCTTTGGCCC	TCGAGACA					438

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GTCGACCCTA	CACCATGTTC	TTCTCCACGT	TCTACCACGC	CTGCGACCAG	CCCGGGGAGG	60
CGGTGCTGTG	CATCCTCAGC	TACGACACGC	TGCAGTACTG	CGACTTCTTG	GGCTCCGGGG	120
CGGCCATCTG	GGTCACCATC	CTGTGCATGG	CACGGCTCAA	GACAGCCCTG	AAATACGTGC	180
TGTTTCTTCT	GGGTACACTG	GTCATCGCCA	TGTCCTTGCA	GCTGGACCGC	AGGGGCATGT	240
GGAACATGCT	GGGGCCCTGC	CTCTTTGCCT	TCGTGATCAT	GGCCTCCATG	TGGGCTTACC	300
GCTGCGGGCA	CCGGCGCCAG	TGCTACCCCA	CCTCGTGCCA	GCGCTGGGCC	TTCTACCTCC	360
TGCCCCGGCT	CTCTACGGCC	TCTTTGGCCC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

GTCGACAGAM	WNCAACCCTC	AGACGCCACA	TCCCCTKACA	AGCTGMCAGG	CAGGTTCTCT	60
TCCTCTCACA	TACTGACCCA	CGGKTCCACC	CTCTCTCCCC	TGGAAAGGAC	ACCATGAGCA	120
CTGAAAGCAT	GATCCGGRAC	GTGGAGCTGK	CCGAGGAGGN	GYTCCCCAAG	AAGACAGGGG	180
GGRCCCAGGG	CTCCAGGCGG	GGGTTTGTTT	CTCAGWCTCT	TCTCCTTCCT	GATCGNNGGA	240
GGGGGCACCA	CGCTCTTCTG	TCTGCTGGAC	TTTGGAGTGA	TCGGNCCCCA	GAGGGAAGGA	300
GTTCCCCAGG	GGAACCTCTC	T				321

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 532 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GTCGACGGCC	GAGAWGGACA	TGAAGCAATA	TCAAGGCTCC	GGCGGCGTCG	CCATGGATGT	60
GGNACGGAGT	CGCTTCCCCT	ACTGCGTGGT	GTGGACGCCC	ATCCCGGTGN	TCACGTGGTT	120
TTTCCCCATC	ATCGGCCACA	TGGGCATCTG	CACATCCACA	GGAGTCATTC	GGGACTTCGC	180
GGGCCCCCTAC	TTTGTCTCAG	AGGACAACAT	GGCCTTTGGA	AAGCCTGCCA	AGTACTGGAA	240
GTTGGACCCT	GCTCAGGTCT	ATGCTAGCGG	GCCCAACGCA	TGGGACACGG	CTGTGCACGA	300
CGCCTCTGAG	GAGWACAAGC	ACCGCATGCA	CAATCTCTGC	TGTGACAAC	GCCACTCGCA	360
CGTGGCATCG	GCCCTGAATC	TGATGCGCTA	CAACAACAGC	ACCAACTGGA	ATATGGTGAC	420
GCTCTGCTTC	TTCTGCCTGC	TCTACGGGAA	GTACGTCAGC	GTTGGGGCCT	TCGTGAAGAC	480
CTGGCTGCCC	TTCATCCTTC	TCCTGTCGAC	GGCCTCTTTG	GCCCTCGAGA	CA	532

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 580 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GTGTACACCA	AGATGATGAC	CAAGAAGCCG	GGCATGTTCT	TCAACCCCGA	GGAGTCGGAG	60
CTGGACCTGA	CCTACGGNAA	CAGATACAA	AACGTGAAGC	TCCCTGACGN	CTACGAGCGC	120
CTCATCCTGG	ACGTCTTCTT	TGGGAGGCAG	ATGNACTTCG	TGCGCAGGGA	CGANCTCCNT	180
GAGGNTGGC	GTATTTTTC	CCCCACTGNT	GTACCANATT	GAGCTNGAGA	AGGCCAAGCC	240
TCCAGGAACA	CATGTGGGGT	CATTACCAA	CAGGGTCCAT	CCACATGATG	GTGAACATCA	300
ANCTTTGGG	GGACAANGAT	TGCTGGGAAT	GGGAATCCTG	TTCACTGGGG	AGCTCTGGGA	360
GTTCTTGAGC	TTTGCTGAAA	GGTACCCTGC	CATCATCTAT	AACATCCTGC	TCTTTGGGCT	420
GACCAGTGCC	CTGGGTCAGA	GCWTCATCTT	TATGACGATT	GTGTATCTTG	GTCCCCTGAC	480
CTGCTCCATC	ATCACTACAA	CTCGAAAGTT	CTTCACAAAW	KTGCCCCGCTG	TGATCCTCTT	540
CGCCAATCCC	ATGTCGACGG	CCTCTTTGGC	CCTCGAGACA			580

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GTCGACACTA CTTATGCGGC TACTTTGTCC AGGGCACAAA ATGCCGTGGC AGTATCTAAC      60
TAAACCCCCA CAAAACTGCT TAATAACAGT TTKGRATGTG AGAAATTTAG ATAATTTAAA      120
TATAAGGTGC AGGTTTTAAT TTCTGAGTTT CTTCTTTTCT ATTTTATTAT AAAAGAAAAT      180
AATTTTCAGA TTTAATTGAA TTGGAAAAAA CAATACTTCC CACCAGAATT ATATATCCTG      240
AAAATTGTAT TTTTGTATA TAAACAACCT TTAAGAAAGA TCATTATCCT TTTCTCTACC      300
TAAATATGAG GAGTCTTAGC ATAATGACAA ATATTTATAA TTTTTCATT AATGGTACTT      360
GCTGGATCCA CACTAACATC TTTGCTAATA ATCTCATTGT TTCTTCGTCA ACGGCCTCTT      420
TGGCCCTCGA GACA                                     434

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(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

```

GTGGACGTTT TTTTTTCTT TTTCTTTTTT TTAAGAAAAA CCCATTTTTT TCCTTAAGGA      60
CTTACTAGCC AAAATTTCTT AAACCTCGAG GACTCTACTA GCCATGGCCG AGCCATTCTT      120
GTCAGAAATAT CAACACCAGC CTCAAACCTAG CAACTGTACA GGTGCTGCTG CTGTCCAGGA      180
AGAGCTGAAC CCTGAGCGCC CCCAGGCGCG GGAGGAGCGG GTGCCCCGAGG AGGACAGTAG      240
GTGGCAATCG AGAGCGTTCC CCCAGTTGGG TGGCCGTCCG GGGCCGGAGG GGGGAAGGGAG      300
CCTGGAATCC CAACCACCTC CTTGTCAGAC CCAGGCCTGT CCAGAATCTA GCTGCCTGAG      360
AGAGGGCGAG AAGGGCCAGA ATGGGGACGA CTCGTCCGCT GGCGGCGACT TYCCGCCGCC      420
GGCAGAAAGTG GAACCGACGC CCGAGGCCGA GCTGCTCGCC CAGCCTTGTC ATGACTCCGA      480
GGCCAGTAAG ATGGGGTCGA CGGCCTCTTT GGCCCTCGAG ACA                               523

```

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

```

GTCGACCCTC ANTGTTCTGG AACTGGTCTT GGAAGGGATN GTTATNCTG AGTACACCTG      60
GGAAGTATTT GGGTACTGTC ANGAGCTGGA GTTGNCTNG NATTACCNTC TTCTGCCNA      120
TCTGGTGGTA GGGGTAAACC NG                               142

```

(2) INFORMATION FOR SEQ ID NO:16:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 534 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```

GTCCACCCGG GCCGCCCTC GCCGCCCGG CTCTTCGCGG GCTGCTCTTT GTCTCCCCGA      60
CCTCGATCCC TGCCTCTCCG GCGGCGTGCG GGCTCGTCTG AGGCTTCCCG CATCTCCCCG      120
CTGGAAGTCC TGCCTCCCGG GGGTTAGAGG AGGGTTCGTT CGAGGGCTGG AAGCGGGAAA      180
GCGGGGCGGA AGGACTGGGC TCATCGCCTC CTGATTAAGT CGTTGTCTTT ACTTAAATG      240
ACTTTTCCCC CACTTTGTCA AACTTGAGAA CTGTSTTGTG TGTGTGTGTT TCCTTGAGTC      300
TCTAGCTTCA AAATTAAGAG TAGGCGCTAC CGCTGCGATT GTGGGCAGTT GTGTGGTTGG      360
CGGCTGCGTT TGGAGCTCTG AGTTGAAAAG ATGTACGTGA ATGTATGGTT TAGATTTTGT      420
TCTTTTTTTT GCGATTGTC' GATTGGGAGT ACTTTTCCTT TCGGAAATGG GCGAATTGG      480
TTTCTTTTTT GTTCATTGAG AACTGGGTG ACGGCCTCTT TGGCCCTCGA GACA          534
  
```

(2) INFORMATION FOR SEQ ID NO:17:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 558 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GTTCMCGAAG GGAAGAAGAA GATGAACAAG AACAAATGCCA AGGCTCTGAG CACCTTGCCT      60
CAGAAGATCC GAAAATACAA CCGTGATTTC GAGTCCCATA TCACAAGCTA CAAGCAGAAC      120
CCCGAGCAGT CTGCGGATGA AGATGCTGAG AAAAGTGAGG AGGATTCAGA AGGCTCTTCA      180
GATGTGGATG AGGATGAGGA CGGAGTCAGT GCTGCAACTT TCTTGAAGAA GAAATCAGAA      240
GCTCCTTCTG GGGAGAGTCG CAAGTTCCTC MAAAAGATGG ATGATGAAGA TGAGGACTCA      300
GAAGATTCCG TAGATGATGA AGACTGGGAC WCAGGTTCCA CATCTTCCGA CTCCGACTCA      360
GAGGAGGAAG AAGGGAAACA AACC GCGCTG GCCTCAAGAT TTCTTAAAAA GGCACCCACC      420
ACAGATGAGG ACAAGAAGGC AGCCGAGAAG AAACGGGAGG ACAAAGCTAA GAAGAAGCAC      480
GACAGGAAAT CCAAGCGCCT GGATGAGGAG GAGGAGGACA ATGAAGGCGG GGTACCGGCC      540
TCTTTGGCCC TCGAGACA          558
  
```

(2) INFORMATION FOR SEQ ID NO:18:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 465 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GTTGACGGCC AGCTTGCTGT CTAACTTTTC ACATCGGAGA AGCTCCTTGG CCTGGGAGGA      60
CTTCTCCGTG CTTTCCCCCT TCCAGAGAT GCCCTGTCG AGGGAGTGGC AGAGACCATC      120
CTGGAGGGTG CCAGGAGCGG GGGCCCGTCT GAAGTCCCCG CCACCCTGGC GGTGCTCCGC      180
AGGCACCGGG CCATCCGACA TCGCACCTCT GCTGGCGCGC ACGCTGGCCT GCTTGTGAAG      240
  
```


AGCATCCTTC	AGCAGGCTGC	CCAGCGGTGG	CGCCTCCTGC	ATAGACGCTT	TGTTTTCAAA	300
AGTACTTGAC	CTTTCCACAG	CCTTCGGATA	GACTTTCTTC	TCTCTCTCTT	CCAGCTTAAA	360
CAGAGCAAAG	TTTTCCAAAT	CACTCCCGGG	TCCATGGGAT	TTCTGGTGGG	ATTCCTGTTT	420
CTCTGGGAAG	CCGTCTGGTC	GACGGCCTCT	TTGGCCCTCG	AGACA		465

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GNNNTCGTTG	TTCCAGAACT	TGATGAGGGG	ATCTCGGAAC	AACACNGAAA	CTTTTCCCTC	60
CCTCANTNAC	GCACCNCGAC	TCTCTATTGA	GCCAACGGNA	ANNCGGCCCT	TCCCTCCAAG	120
TAACTTTGNA	TTTGAAAATA	AAAAAAAAG	NTTGCTGTCC	TTGCTATCCA	AGAATAAATA	180
GACCTNCAAN	TATTAACTCT	TTGTTTCCCT	CGTCATTGTT	CTCGTTCCCT	TTCTNCCTTG	240
TTTCTTTTTC	TGCACAATAT	ATCAAGCNAT	ACCAAGCATA	CAATCAAAC	CCAAGCTCGG	300
AATTCGGA	NAGAGACCGT	CGACGGAAGA	AATTGNCTGG	AAACTTGTTT	ATGGTGATAT	360
ATACCGTCCN	CCAAGAAAAG	GGATGCTGCT	ATCAGTCTTT	CTAGGATCCG	GGACACAGAT	420
ATTAATTATG	ACCTTTGTGA	CTCTATTTT	CGCTTGCCCTG	GGAGTTTGT	CACCTGCCAN	480
CCGAGGAGCG	CTGATGACGT	GTGCTGTGGT	CCTGTGGGTG	CTGCTGGGCA	CCCCTGCAGG	540
CTATGTTGCT	GCCAGATTCT	ATAAGTCCTT	TGGAGGTGAG	AAGTGGAAAA	CAAATGTTTT	600
ATTAACATCA	TTTCTTTGTC	CTGGGATTGT	ATTTGCTGAC	TTCTTTATAA	TGAATCTGAT	660
CCTCTGGTCA	ACGGCCTCTT	TGGCCCTCGA	GACA			694

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

AGACTCGTCT	CAGACCACTT	GCAGCCTTCT	CAACCCAAAC	GCCGACCAAG	GAAAAACTCA	60
CTACCATGAG	AATTGCAGTG	ANTTGCTTTT	GCCTCTAGG	CATCACCTGT	GCCATACCAG	120
NTAAACAGGC	TGATTCTGGA	AGTTCTGAGG	AAAAGCAGCT	TTACAACAAA	TACCCAGATG	180
CTGTGNCCAC	ATGGCTAAAC	CCTGACCCAT	CTCAGAAACA	GAATCTCCTA	GCCCCACAGA	240
CCCTTCCAAG	TAAGTCCANC	GAAAGCCATG	ACCACATGGA	TGATATGGAT	GATGAAGATG	300
ATGATGACCA	TGTGGACAGC	CAGGACTCCA	TTGACTCGAG	CGACTCTGAT	GATGTAGATG	360
ACACTGATGA	TTCTCACCAG	TCTGATGAGC	CTCACCATTG	TGATGAATCT	GATGAAGTGG	420
TCACTGATTT	TCCCACGGAC	CTGCCGTGCA	CGGCCTCTTT	GGCCCTCGAG	ACA	473

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

AGAAGCTGTG ATCTTCAAGA CCATTGTGTC CAAGGAGATC TGTCTGATCC CAAGCAGAAG	60
TGGGTTTCAGG ATTCCATGGA CCACCTGGAC AAGCAACCCA AAAGTCCGAA GACGTGAACA	120
CTCACTCCAC AACCCAAGAA TCTGCAGCTA ACTTATTTTC CCCTAGCTTT CCCAGACGT	180
CGACGCCTCT TTGCCCTCGA GACA	204

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GTCCACACAC GCCGACCACG GAAAACCTCAC TACCATGAGA ATTGCAGTGA TTTGCTTTTG	60
CCTCCTAGGC ATCACCTGTG CCATACCACT TAAACAGGCT GATTCTGGAA GTTCTGAGGA	120
AAAGCAGCTT TACAACAAAT ACCCAGATGC TGTGGCCACA TGGCTAAACC CTGACCCATC	180
TCAGAAGCAG AATCTCCTAG CCCACAGAA TGCTGTGTCC TCTGAAGAAA CCAATGACTT	240
TAAACAAGAG ACCCTTCCAA GTAAGTCCAA CGAAAGCCAT GACCACATGG ATGATATGGA	300
TGATGAAGAT GATGACGACC ATGTGGACAG CCAGGACTCC ATTGACTCGA ACGACTCTGA	360
TGATGTAGAT GACACTGATG ATTCTCACCA GTCTGATGAG TCTCACCATT CTGATGAATC	420
TGATGAACTG GTCAGTATT TTCCGTCGAC GGCCTCTTG GCCCTCGAGA CA	472

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GTCGACTGAA AATTAACCTT CAGACGCCAC ATCCCCTGAC AAGATGCCAG GCAGGTTCTC	60
TTCTCTCAC ATACTGACCC ACGGGTCCAC CCTCTCTCCC CTGGAAAGGA CACCATGAGC	120
ACTGAAAGCA TGATCCGGGA CGTGGAGCTG GCCGAGGAGG NNTTNNCCAA GAAGACAGGG	180
GGGGCCCAGG GGTCCAGGNG GNGCTTGTTT CTCAGACTCT TCTCCTTCCT GATCGTGGGA	240
GGNGNCACCA CGCTCTTCTG NCTGNTGNAC TTTGGAGTGG ATCCGGGCCC CAGAGGGAAG	300
AGTTCCCCCA GGGGACTCTT CTCTAATCNA GNCCTCTTGG	340

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

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GTCGACGCGC GCCGGTAAAA ATGGCGAAAT GGGGGTAGGC GCGCTGGAC CTGAAGAGAT      60
GGGGCGCGCA GGTGGGGCGG TTGTCAGAGC CCCCTGACGT GGGCGCCGGG CTTTATCGG      120
CGATTTGATC TGGCGACCTC GGGCCGGCGC CTAAGAGGTC AGACTGCGGA GCCTGCGGGT      180
CGCCAGCGGC CCCGCCGAGT GCCGGAGGCA ATGGATGAAC AGAGCGTGGA GCGCTGKCTG      240
WCAGAGCAGA GAGCTCAATG TCCTCATTCC CGTGCTCCAC TCCAGTACG AGAACTAGTA      300
AATTGTCGTT GGGCAGAAGA AGTAACACAA CAGCTTGATA CTCTTCAACT CTGCAGTCTC      360
ACCAAACATG AAGAAAATGA AAAGGACAAA TGTGAAAATC ACCATGAAAA ACTTAGTGTA      420
TTTTGCTGGA CTTGTAAGAA GTGTATCTAC CATCAGTGTG CACTTTGGGT CGACGGCCTC      480
TTTGGCCCTC GAGACA

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(2) INFORMATION FOR SEQ ID NO:25:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

AGACACATAG ACCAACCGGG GAGATATGTT TGAATNTGAT GAAGATGAGA TGTCTATGT      60
GGATCTGNAC AAGAAGGAGA CCTCTGTCAT CTGGAGGAGA NTGNCCAACC CTTTCTCTTT      120
GAGNCTCAGG GNGGGCTGTC TAACATTGCT ATANTGAACA ACAACNTGAA TACCTTGATC      180
CAGCGTTCCA ACCACACTCA GNCCACCAAC GATCCCCCTG AGGTGACCGT GTTCCCAAG      240
GTCACGGCCT CTTTGGCCCT CGAGACA

```

(2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 451 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```

GTCGACCTTG AAGATGTTTT CTAAAGAATC AAAAATGCTA CAAAGAAGTA TATCATTTTC      60
AAATATGGCT TTATCGTCTT GTTTACTTTT ACCAGGAGAT GCCACTGTCA TAACTTCTTC      120
ATGGGATAAT AATGTCTATT TTTATTCCAT AGCATTTGGA AGACGCCAGG ACACGTTAAT      180
GGGACATGAT GATGCTGTTA GTAAGATCTG TTGGCATGAC AACAGGCTAT ATTCTGCATC      240
GTGGGACTCT ACAGTGAAGG TGTGGTCTGG TGTTCTTGCA GAGATGCCAG GCACCAAAAG      300
ACACCACTTT GACTTGCTGG CCGAGCTGGA ACATGATGTC AGTGTAGATA CAATCAGTTT      360
AAATGCTGCA AGCACACTGT TAGTTTCCGG CACCAAAGAA GGCACAGTGA ATATTTGGGA      420
CCTCAACG GCCTCTTTGG CCCTCGAGAC A

```

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 456 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GTTGACGCAA	GTTGCTGGGC	TGGTGGGGGC	CTGTCAAGTG	AGGCCTGGTG	GAGAAAGGTT	60
GAATTTGGAG	GGCCAGGAAC	AAGCTGGGAT	GCAGGGGAGG	CTTTCTAAAC	TCTACAGTGC	120
TTCTAGAGAT	GACGAGGAGG	TAGGGAGTAG	AAGAGAGCCG	GACAGATTAG	GGAGCTCCCA	180
GGGTGAGCTT	GTGGGCAGSC	CTSCAGAGGA	GAAGAGGCTC	TCCCTAGGA	GCTCAGAGGG	240
ACTTGTCTCG	GAAGACTGAT	GGGAGATGTA	TGCAGCTGTT	TAGAGGCTGC	TTTGAGAGAA	300
AAATGAACAT	GGTTCTGGTT	GTGCAAGCAG	TTACTGTGGT	TCTTTTGGCT	CATATATCTT	360
CCAATAAAGA	CATTGAGCGA	GGAGAGTTGA	TACCGTCATG	TTTTTGGAGC	TTAAGCACAG	420
ACTGGCAGGT	CGACGGCCTC	TTTGGCCCTC	GAGACA			456

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GTCGACAGAA	TTCACAACAT	CCCAAGATTC	CACCTCNCAA	GATGTTTTCT	AAAGNAATCA	60
AAAATGCTAC	AAAGAAGTAT	ATCATTITCA	AATATGGCTT	TATCGTCTTG	TTTACTTTTA	120
CCAGGAGATG	CCACTGTCAT	AACTTCTTCA	TGGGATAATA	ATGTCTATTT	TTATTCCATA	180
GCAATTTGGA	GACGCCAGGA	CACGTTAATG	GGACATGATG	ATGCTGTTAG	TAAGGATCTG	240
TTGGCATGAC	AACAGGCTAT	ATTCTGCATC	GTGGGACTCT	ACAGTGAAGG	TGCCGTCTGG	300
TGTTCCCTGC	AGAGATGCCA	GGCACCAAAA	GACACCACTT	TGGCTTGNTG	GCCGAGCTGG	360
ACATGATGTC	AGNGTNGGTA	CAATCAAGNT	TANNA			395

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GTGGNCCGAG	ATAGAGGAGG	CTTCCCTCCA	AGAGGACCCC	GGNGTTCCCG	AGGGAACCCC	60
TCTNGAGGAG	GAAACGTCCA	GCACCGAGCT	GGAGACTGGC	AGTGTCCCAA	TCCGGGTTGT	120
GGAAACCAGA	ACTTCCCCTG	GAGAACAGAG	TGCAACCAGT	GTAAGGCCCC	AAAGMCTGAA	180
GGCTTCCTCC	CGCCACCCTT	TCCGCCCCCG	GGTGGTGATC	GTGRCAGAGR	TGGCCCTGST	240
GGCATAACGG	GAGGAAGAGR	TGGCCTCATG	GATCGTGGTG	GTCCCGGTGG	AATGTTTCAA	300
GRTGGYCGTK	GTGGAGACAG	AGRTGKCTTC	CGTKGTGGCC	GGGGCATGGA	CCGAGGTGKC	360
TTTGGTGGAG	GAAGACNAGG	TGTCCCTGGG	GGCCCCCCTG	NTCCTTTGAT	GGAACAGATG	420
GGAGGAAGAA	GAGGAGGACG	TGGGTCGACG	NCCTCTTTGT	CCCTCGAGAC	A	471

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GTCGACCGTC	TACGCCTACA	CCATGTTCTT	CTCCACGTTT	TACCACGCCT	GCGACCAGCC	60
CGGGGAGGCG	GTGCTGTGCA	TCCTCAGCTA	CGACACGCTG	CAGTACTGCG	ACTTCTTGGG	120
CTCCGGGGCG	GCCATCTGGG	TCACCATCCT	GTGCATGGCA	CGGCTCAAGA	CAGTCCTGAA	180
ATACGTGCTG	TTTCTTCTGG	GTACACTGGT	CATCGCCATG	TCCTTGACAG	TGGACCGCAG	240
GGGCATGTGG	AACATGCTGG	GGCCCTGCCT	CTTTGCCTTC	GTGATCATGG	CCTCCATGTG	300
GGCTTACCGC	TGCGGGCACC	GGCGCCAGTG	CTACCCACCC	TCGTGGCAGC	GCTGGGCCTT	360
CTACCTCCTG	CCCGGCGTCT	CTACGGCCTC	TTTGGCCCTC	GAGACA		406

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

GTGCCCCAGC	AAGTGAGCAG	ATCCTCCGAG	GCACCAGGNN	ACTCCAGCCC	ATGCCATGGC	60
GGATTCTGAG	CGCCTCTCGG	CTCCTGGCTG	CTGGGCGGCC	TGCACCAACT	TCTCGCGCAC	120
TCGAAAGGGA	ATCCTCCTGT	TTGNTGAGAT	TATATTATGC	CTGGTGATCC	TGATCTGCTT	180
CAGTGNCTCC	ACACCAGGCT	ACTCCTCCCT	GTCGGTGAYT	GAGATGATCC	YTSCTCSCTA	240
TCTTTCCTYT	GTTGTCTACA	TGTGTGACCT	GCACCACCAA	GATACCATTG	ATCAACTGSS	300
CCTGGAGTGA	TTTCTTCCGA	ACCCTCATAG	GGGSAATCCT	CTACCTGATC	AMCTCCATTG	360
TKGTCTTKGT	TGAGAGAGGA	AACCACCCCN	TNAATCGTTC	GTAGGGGTAC	TGGGCCTAAT	420
CGCTACGGCC	TCTTTGGCCC	TCGAGACA				448

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

TTNCAATCNC	CGATCCCCAT	CACGAATGGG	GGGCACCGGG	TTACCCCCCC	CCTCCCGCCG	60
TAGGGTAGGC	ACACNCTGAG	CCAGTCAGTG	TATCGCGCGT	GCATCCCCGG	ACATCTAAGG	120
GCATCACAGA	CCTGTTNTTG	NTCAATCTCG	GGTGGNTGNN	CGCCACTTGT	CNCTCTAAGA	180
ANATGGGGGA	CGCCGNCCGC	TCGGGGGTNG	CGTAACTAGN	TAGNATNCCA	GAGTCTCGTT	240
CGTTATCGGA	AGTAACCAGA	CANATCGCTC	CNCCAACTAA	GANNNGCCAT	NCACCACCAC	300
CCACGGAATC	GAGANAGAGC	TATCAATCTG	TTGTAGGACA	TAACCCGGCT	TCTTGGTCAT	360
CATCNTGGTG	TACNCGNCTT	CTTTGNCCCT	CGAGACA			397

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```

TCCTGCCTGC TGGGCCGCCT TNCACCCAAC TTCTCGCGCA CTCGAAAGGG AATCCTCCTG      60
TTTGCTGAGA TAAATANTAT NCCTGGTGAT CCTGATCTGC TTCAGTGCCT CCACACCAGA      120
CNACTCCTCC CTGTCCGTGA TTGAGATGAT CCTTGCTGCT ATTTTCTTTG TTGTCTACAT      180
GTGTGACCTG CACACCAAGA TACCATTTCAT CAACTGGCCC TGGAGTGATT TCTTCCGAAC      240
CCTCATAGCG GCAATCCTCT ACCTGATCAC CNCCGTTGTT GTCCTTGTTG AGAGAGGAAA      300
CCACTCCTAC AATCGTCGCA GGGGTACTGG GCCTAATCGC TACGGCCTCT TTGGCCCTCG      360
AGACA                                          365

```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```

GTCGACGACA CGCTGTCTTC ACTACCTGAT TGCCCAGAAG ATCCCACTG TCTACACTAC      60
CTGCCTGGCC AGTAGATCCA CGGTATCTAC ACTACCTCCC TGGCCAGCAG ATTCACCCAG      120
TCTACACTAA CCGCTTGTC AGCAGGTCCA CCCTGTCTAC ACTACGTGCC TGCCAGCAGA      180
TCCAAGCTGT CTACACTCCC TGCTGGCCA GTAGATCCAT GCTATCTCCA CTACCTGCCT      240
ATCCAAGTGA TCCACCCTCT CTTTACTACC TTCTGTCCG GCAGATTGAC CCTCTCTACT      300
CTACCTGCCT GGCCAGCAGA TCCACGCTAT CTACACTACC TGAATTACCA GATCCACCCT      360
GTCTACACTA CATGCTTGTC CAGCAGGTCC ACCCTGTCTA CACTACCTGC CTCTCCAGAA      420
GATCCACGTC AACGGCCTCT TTGGCCCTCG AGACA                                          455

```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```

GGGANTTNGG CCCAAAGAGC CCGTTTGAGT NAACCNAAGA AGTCAAGATT GGCCCNAAAGT      60
TCCAGANATG TTTTGAAGAC CTGGAGAACT GTTACAGTGN AAATGAAGAA GACAGTTCCT      120
CCATTGATCA TCTGTCTCTG AATCAGAAAT CTTTCTATCA TGTAAGCTAT GGCCCACTCC      180
ATGAAGGCTG CATGGATCAA TCTGTGTCTC TGAGNATCTC TGAAACCTCT AAAACATCCA      240
AGCTTACCTT CAAGGAGAGC ATGGTGGTAG TANCANCCAA CGGGAAGGTT CTGAAGAAGA      300
GACGGTTGAG TTTAANCCAA TCCATCACTG ATGATGACCT GGAGGCCATC GCCAATGACT      360
CAGAGGAAGA AATCATCAAG CCTAGGTCAT CACCTTTTAG CTCCCCGAGC AATGTGAAAT      420
ACAACTTTAT GAGGATCATC AAATACGAAT TCATCTGAA TGACGCCCTC AATCAAAGGT      480
CGACGGCCTC TTTGGCCCTC GAGACA                                          506

```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

CGGTAAACGCN GTTNTCCTNA GCGGAGCTCA GGGAGNACAA GAAACCCTCC CGTGGAGCAA	60
GAANGCCACA AGCTCNCTTG ATCTTGATTA TCAGGACGAA AACAGACCGT GAAAGCGGGG	120
CCTCACGATC CTTCTGACCT NNTGGGTNTT AAGCAGGAGG TGTCAGAAAA GTTNCCACAG	180
GGATAACTGN CTTGTGNCGN CCAAGCGNTC ATAGCGACGT CGCTTTTGA TCCTTCGATG	240
TCGGCTCTTC CTATCATTGT GAAGCAGAAAT TCACCAAGCG TTGGATTGTT CACCCACTAA	300
TAGGGAACGT GAGCTGGGT TAGACGCTCG TGAGACAGGT TAGTTTACC CTACTGATGA	360
TGTGTTGTTG CCATGGTAAT CCTGCTCAGT ACGAGAGGAA CCGCAGGTTT AGACATTTGG	420
TGTATGTGCT TGGCTGAGGA GCCAATGGTC GACGGCCTCT TTGGCCCTCG AGACA	475

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 460 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GTTGACCCGA TGGAGGAGGA GGAGGTTGAG ACGTTCGCCT TTCAGGCAGA AATTGCCCAG	60
TTGATGTCAT TGATNCATCA ATACTTTCTA CTCGANCAAA GAGATCTTTC TGAGAGAGCT	120
CATTTCAAAT TCATCAGATG CATTGGACNC AATCCGGTAT GAAAGCTTGA CAGATCCCAG	180
TAAATTAGAC TCTGGGAAAG AGCTGCATAT TAACCTTATA CCGAACAAAN AAGANCGAAC	240
TCTCACTATT GTGGATACTG GAATTGGAAT GACCAAGGCT GACTTGATCA ATAACCTTGG	300
TACTATCGCC AAGTCTGGAC CAAAGCGTTC ATGGAAGCTT TGCAGGCTGG TGCAGATATC	360
TCTATGATTG GCCAGTTCGG TGTGTTGTTT TATTCTGCTT ATTTGGGTGC TGAGAAAGTA	420
ACTGTGATCA CCGTCGACGG CCTCTTTGGC CNGCGAGACA	460

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 435 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

TCAAGCAATA CCCAAGCAAA CAATCNACTC CAANCTCGGA ANTCGNCCNA AGAGACCGTC	60
GACCCCGTGT TCACNATGGT AGNNACGCCG NCTACCATCG ANAGTTGATA GGGCAGACGT	120
TCGNGTGGGT CGTCTCCCCC CCGGGGGGCG TGCGATCGCC CCGAGGTTAT CTAGAGTCAC	180
CACACCCGCC GCGGCCCNCC CCCCNGCCGN NAAAAAAGA GGGGCTGTCT GGGNTGGTTT	240
TGNTNTGATA AATANACGCA TCCCCCCCC GNNGGGGGNN AGCGCCCGTC GGCATGTATT	300
ANCTCTAGAA TTACCACAGT TATCCAAGTA GGAGAGGAGC GAGCGNCCAN AGGANCCATA	360
NCTGATTTAA TGAGCCATTC NCAGTTTCNC TGTTCCGNCC GTGCGTACGN AACGACCTCT	420
TTGTNCNTAA AGNCG	435

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GTCGACCACA CTGCTGCTCA CGCTCAGCAA CCTCATGTTC CTGGCCCCCA TCGCCGTCTC      60
AGTGCGGCGA TTCTTCCTGG TGGAGGCCTC CGTCTACGCC TACACCATGT TCTTCTCCAC      120
GTTCTACCAC GCCTGCGACC AGCCCGGGGA GCGGGTGCTG TGCATCCTCA GCTACGACAC      180
GCTGCAGTAC TCGACTTCT TGGGCTCCGG GCGGGCCATC TGGGTCACCA TCCTGTGCAT      240
GGCACGGCTC AAGACAGTCC TGAAATACGT GCTGTTTCTT CTGGGTACAC TGGTCATCGC      300
CATGTCCTTG CAGCTGGACC GCAGGGGCAT GTGGAACCTG CTGGGGCCCT GCCTCTTTGC      360
CTTCGTGATG ATGGCCTCCA TGTGGGCTTA CCGCTGCGGG CACCGGCGCC AGTGCTACCC      420
CACCTCGTGG CAGCGCTGGG CCTTCTACCT CTTGCCCGGC GTCTCTACGG CCTCTTTGGC      480
CCTCGAGACA                                     490

```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

CGTCTCAGGC CAGTTNCANC CTTCTCANNC AGAACGGCGN CCCAAGGAAA ANCTCACTAC      60
CATGAAGAAT TGCAGTGATT TGCNTTTGCC TCCTAGGCAT CACCTGTGCC ATACCAGNTA      120
AANCAGGCTG ATTCTGGAAG TTNCTGAGGG AAAAAGCAGC TTTACAACAA ATACCCAGAT      180
GCTGTGGCCA CATGGCTAAA CCCTGANCCA TCTCAGAAGC AGAATCTCCT AGCCCCACAG      240
AATGCTGTGT CCTCTGAAGA AACCAATGAC TTTAAACAAG AGACCCAAAC AAGTNAGTCC      300
NACGAAAGCC ATGACCACAT GGATGATATG GATGATGAAG ATGATGATGA CCATGTGGAC      360
AGCCAGGACT CCATTGACTC GNNCGACTCT GATGATGTAG ATGACACTGA TGATTCTCAC      420
CAGTCTGACG AGTCTACCA TTCTGATGAA TCTGATGAAC TGGTCACTGA TTTTCCCACG      480
GACCTGCCGT CGACGGCCTC TTTGACCCTC GAGACA                                     516

```

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GCCAAGACTC GTCTCAGNCC AGTTGCAGCC TTCTCANCCA AACNCCGACC CAAGGANAAC      60
TCCCCTACCA TGAGAATTGC AGTGATTTCG TTTTGCCCTC TAGGCATCAC CTGTGCCATA      120
CCAGTTAAAC AGGCTGATTG CTGGAAGTTC CTGAGGAAAA GCAGCTTTAC AACAAATACC      180

```


CAGATGCTGT	GTCCACATGG	CTAAACCCTG	ACCCATCTCA	GAAGCAGAAT	CTCCTAGCCC	240
CACAGAATGC	TGTGTCCTCT	GAAGAAACCA	ATGACTTTAA	ACAAGAGANN	CANCCAAGTA	300
AGTCCANCGA	AAGCCATGAC	CACATGGATG	ATATGGATGA	TGAAGATGAT	GATGACCATG	360
TGGACAGCCA	GGACTCCATT	GACTCGANCG	ACTCTGATGA	TGTAGATGAC	ACTGATGATT	420
CTCACCAGTC	TGACGAGTCT	CACCATTCTG	ATGAATCTGA	TGAACTGGTC	ACTGATTTTC	480
CCACGGACCT	GCCGTCGACG	GCCTCAATGN	CCCTCGAGAC	G		521

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GCAAGCAANC	AATCCAACCC	AAGNTNGGGA	NTCGNCCNAA	GAGNCCGTTG	ANCAGAAGCC	60
ANTNATGGAT	GANCAGCGCG	ACCTTATCTC	CAACAATGAG	CAACTGNCCA	TNCTGGGNCC	120
GGNCGCCCTG	GGGCNCCGGA	GAGCAAGTGC	ANCCGCGGAG	CCCTGTACAC	AGGCTTTTCC	180
ATCCTGGTGA	CTCTGCTCCT	CGCTGGCCAG	GCCACCACCG	CCTACTTCCT	GTACCAGCAG	240
CAGGNCCGGC	TGGACAAACT	GACAGTCACC	TCCCAGAACC	TGCAGCTGGA	GAACCTGCGC	300
ATGAAGCTTC	CCAAGCCTCC	CAAGCCTGTG	AGCAAGATGC	GCATGNCCAC	CCCCTGCTG	360
ATGCAGGCGC	TGCCCATGGG	AGCCCTGCCC	CAGGGGCCCA	TGCAGAATGC	CACCAAGTAT	420
GGCAACATGA	CAGAGGACCA	TGTGATGCAC	CTGCTCCAGA	ATGCTGACCC	CCTGAAGGTG	480
TACCCGCCGT	CGACGGCCTC	TTTGGCCCTC	GAGACA			516

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

TGCTATCCNA	GNATAAAATA	AGACCCTGCA	ANTATTAATC	TTNTTTGTTT	CCTCGTCATT	60
GTTCTCGTTC	CCTNTCTTCG	TTGTTTCTNN	TTCTGCACAA	TATNTTCAAG	CTATACCGAG	120
CATACAATCA	AACTCCAAGC	TCGGAATTCG	NCCAAAGAGG	CCGTCGAGCC	GAATTCTCCA	180
CNAGAATAGC	ATTTCTGCTC	ATCTGCATGG	TCGCAGTCAC	GAGCCAGATG	NCCTGNNTTN	240
CCACAGTTGT	AGCAGCATTG	CTCTCGCTCT	CTCTTGGGCT	CCTTGCAATG	CTTGGCAATG	300
TGGCCGCCTC	TACCGCAGTT	ATAGCAGGCA	TCCTCCTGAA	GATCACAATC	CTTGGCAAGA	360
TGACCAGACT	CACCACAGCG	ATAACAAATA	TCTGGAAGAG	ACGAGGAAAC	AAACTGGAAA	420
CCTCTATCCG	AGGTAAAACC	ACCTCTGCCA	CGGCTTCTCA	TTCCACGACC	ACGGCCTCTT	480
TGGCCCTCGA	GACA					494

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 654 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

CCTCCANATN	ANCTTTNTTC	CTCTCATTGT	NTCGTCCCTC	CTCCTTGTTT	TTTNGTGCCC	60
AAAATCCANC	AAANCCAACA	ACCATCCNCN	CCACCTGGAA	GTNGCCCAAA	GAGGCCGNAC	120
CAAGAAGTGT	CGATTCCTTT	GTNTGNAGGA	GCGACCAGGA	ACATCTACGG	TTGAGAAGAA	180
AGAAAGANTG	CCTTCGTCTG	TGTCTTCCTG	TGTGAANTTT	CCAGACATAG	CCCAGTCGAC	240
CAGCCTTCCC	CACNAGACTG	GAGCGTCTCT	ATTGTATNTG	GGTCCCTGTA	AGAGTAGAAG	300
GGTGAAAATC	CCANTGTGTC	TGAGTNTTGC	GCCNCCACCA	TAAACACCGC	CTTTTTCTCG	360
AATTTCTGTA	TNCAAGAAAN	TGTCAGTCAT	CACACGTGCA	AGGATNTTAA	GACTGNCATG	420
ATCTGGGNCC	GTGTAGGGGN	CAGNTCCGAT	NCATTCACCC	ACGTAATTCA	CCGGGANGGG	480
CATCAGGAAG	TGAGTCTTCA	TCTCCCAGGG	CGTGNAGGTG	GGTNCCATGA	CCAGCTTCCT	540
AATGACCTGG	GAGCCATGGG	GAACGTGGGC	ATCTCCACCA	GAGCTACTGG	GCACAGGTTT	600
CTCGACCGTG	TGTGGNCGCA	CAGACCGTCG	ACGGCCTCTT	TGNCCCTCGA	GACA	654

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

GTCGACCTGA	GAATCTGGAA	AAATTGGAGA	AGTTGGGTAT	GAGCTCAGAC	CTGGTGAGCA	60
GGCTGCCTAC	CATTATAGA	AATGCACATG	ACATCAAGAA	TAAGAGCTCT	GCCCCCAGCA	120
GAGTGCCTCC	TCTTTTGTG	CCACAGGGGA	CTTCTGAAAG	AAAAGACAGT	TCAGGTTCTG	180
TGTCCCCAMA	CACTCTTAGC	CAGGAGGAGG	GTGATCAGAT	CTGTTTGTKC	CATATCCGGA	240
AAAGTTGTAG	CTTTCAAGAT	AAGTGCCATA	GAGTTCATTT	CCATTTGCCG	YATCGATGGC	300
AATCTTTGGA	TAGAGGCAAA	TGGGAGGATT	TGGACNACAT	GGAACNTATT	GTAGAGNCAT	360
ATTGCAATCC	CCCCATAGAA	AGGATCCTGT	GCTCTGAGTC	AGCCAGTACC	TTTCACTCTC	420
ATTGTCTGAA	CTNTAACGCC	ATGACTTACG	GTGCTACCCA	GGCTCGCCGC	CTCTCCACGG	480
CCTCTTTGGC	CCTCGAGACA					500

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

GTCGACACAA	ATGTTTCCTT	GGATAATCCA	GCTTTACATG	GTGAGAACCA	TGCTAGAGTC	60
CCTCATTGCA	GACAAAAGTG	GTTCCAAGAA	AACCTTGAGA	AGTAGCCTTG	AGGGGCCCCAC	120
CATATTGGAC	ATAGAAAAAT	TTCATCGAGA	GTCATTCTTC	TACACTCACT	TGATAAAATT	180
CAGTGAAACG	CTGCAGCAGT	GCTGTGACCT	TTCGCAGCTG	TGGTCCGAG	AGTTCTTCTCT	240
GGAGCTGACC	ATGGGCAGGA	GGATCCAGTT	CCCCATTGAG	ATGTCGATGC	CCTGGATCCT	300
GACGGACCAC	ATCCTGGAGA	CCAAGGAGGC	ATCGATGATG	GAGTACGTGC	TCTACTCCCT	360
GGACCTGTAC	AATGACAGCG	CCCACTACGC	GCTCACCAGG	TTCAACAAGC	AGTTCCTCTA	420
CGACGAAATT	GAGGCCGAGG	TCACGGCCTC	TTTGGCCCTC	GAGACA		466

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GTCGACGGAA GTTGATTTTT AATGATAAAG TACAATGAAG GGAGGGCAGA GGGGCTAAGC      60
CTAGCTGTCT GGGGTGCTGT GGTGGTGGTA GACTGGCTAC ACAAAGTGTG GCTGCTGCTG      120
CTGCTTCTTG GTGGCCGCCT TGCTGGCGAG GTCCTTGGCC TTCTCTGTAG CTGCCAGTGC      180
CGTCTCCTTT GCCTTCTCCT TGGCTTCCTT GGCTGTCTCA ACAAGTGTGT TGAAGGGGGC      240
CTCGCCTTGC AGCTTAGCCA AGATATATTC AAAACCCTTC ATAGTCTTGG TCACGTTGCT      300
TTTGAACCGG GCAAGACCAA ATTCCTGGAC AGCTCTGGCT ACACAACTG TTGCTGGTCA      360
ACGGCCTCTT TGGCCCTCGA GACA                                     384

```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GTGACGGGAC AAAAATCTAG GGAGGCACCA ATCCTGAAAG AGTTTAAGGA AGAAGGGGAA      60
GAGATACCTA GAGTAAACC AGAGGAGATG ATGGATGAGA GACCCAAAAC AAGATCCCAG      120
GAACAGGAGG TGTTAGAGAG AGGAGGGAGA TTTACAAGAT CCCAGGAAGA GGCTAGAAAA      180
AGTCATCTGG CCAGACAGCA GCAGGAGAAG GAAATGAAAA CAACATCTCC CCTTGAGGAG      240
GAAGAAAGAG AAATAAAATC TTCACAAGGC TTAAAGGAAA AATCGAAGTC TCCTTCCCCCT      300
CCTCGACTGA CTGAAGATCG AAAGAAGGCC CCACTTGTAG CGCTGCCAGA GCAAAGTGCC      360
AGCGAGGAGG AGACTCCTCC ACCTTTACTA ACAAAGGAAG CATCTTCTCC ACCACCTCAT      420
CCACAGCTCC ATAGCGAAGA AGAAATAGAG CCCATGGAAG GCCCAGCCCC CCCTGTCCTC      480
ATTGAGTTAT CTCCTCCTAA TACAGATGCT GACACCAGGT CGACGGCCTC TTTGGCCCTC      540
GAGACA                                     546

```

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GTCGACGTCG GTGGTGCGAG CGGCGGCGGC GGGCGTTCCA GCATGAAGAG GAGAGCTGGC      60
CTGGGGGGCA GCATGAGGTC AGTGGTGGGC TTCTTGTCCTC AGCGGGGCTC GCATGGGGAC      120
CCCCTGCTCA CTCAGGACTT TCAGAGGAGA CRCCTGCGGG GCTGCAGAAA CCTCTACAAG      180
AAGGACCTCC TCGGCCACTT CGGCTGTGTC AATGCCATTG AATTCTCCAA CAATGGAGGC      240
CAGTGGCTGG TCTCAGGAGG AGATGACCGC CGGGTTCTGC TATGGCACAT GGAACAAGCC      300
ATCCACTCCA GGGTCAAGCC CATACAGCTG AAAGGAGAGC ACCATTCCAA CATTTTTTGC      360

```

CTGGCTTTCA	ACAGTGGGTA	CACTAAAGTG	TTCTCTGGAG	GCAATGATGA	GCAAGTTATC	420
CTCCATGATG	TTGNAAGCAG	TGAGACATTG	GACGTGTTTG	CTCATGAAGA	TGCAGTATAT	480
GACTTGTCTG	TGGTCNGCGC	CCTCTTTGGC	CCTCGAGACA			520

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GCTGACTCCA	GACACACCCC	CCAGTCGAGC	CCTGCAGCCA	AACAGAGCCT	TCACAACCAG	60
CCACACAGAG	CCTGCCTCAG	CTGCTCGCAC	AGATTACTTC	AGGGCTGGAA	AAGTCACACA	120
GACACACAAA	ATGTCACAAT	CCTGTCCCTC	ACTCAACACA	AACCCCAAAG	CACAGAGAGC	180
CTGCCTCAGT	ACACTCAAAC	AACCTCAAAG	CTGCATCATC	ACACAATCAC	ACACAAGCAC	240
AGCCCTGACA	ACCCACACAC	CCCAAGGCAC	GCACCCACAG	CCAGCCTCAG	GGCCACAGG	300
GGCACTGTCA	ACACAGGGGT	GTGCCCAGAG	GCCTACACAG	AAGCAGCGTC	AGTACCCTCA	360
GGATCTGAGG	TCCCAACACG	TGCTCGCTCA	CACACACGGC	CTGTTAGAAT	TCACCTGTGT	420
ATCTCACGCA	TATGCACACG	CACAGCCCTC	AACGGCCTCT	TTGGCCCTCG	AGACA	475

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

CCTGCCACAA	TAATNTCCNA	AGCCTAAAAC	CCGAGCAATA	CAANCNAACC	CAAGCTCGGA	60
AATCGGGCCA	AAGAGACCGT	TCTTAGNTGG	TGGAGCGATT	TGTCTGGTTN	ATTCCGATAA	120
ACGAACGAGA	CTCTGGCATG	CTAACTAGTT	ACGCGACCCC	CGAGCGGTCG	GCGTCCCCCA	180
ACTTCTTAGA	GGGACAAGTG	NCGTTCANCC	CACCCGAGAT	TGAGCAATAA	CAGGTCTGTG	240
ATGCCCTTAG	ATGTCCGGGG	CTGCACGCGC	GCTACACTGA	CTGGCTCAGC	GTGTGCCTAC	300
CCTACGCCGG	CAGGCGCGGG	TAACCCGTTG	AACCCCATTC	GTGATGGGGA	TCGGGGATTG	360
CAATTATTCC	CCATGAACGA	GGAATTCCCA	GTAAGTGCGG	GTCATAAGCT	TGCGTTGATT	420
AAGTCCCTGT	CGACGGCCTC	TTTGGCCCTC	GAGACA			456

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GTCGCRRCAA	SMTYTYTMMA	CTGTGGNGGG	GCTCTACCCN	TGAGGGCCTG	GCCGCARCNT	60
------------	------------	------------	------------	------------	------------	----

GGCTGSGGGC	TGWC GACTAT	GAACAGRTCG	AGAAMGTGKN	CGATTACTAC	CCGGAGTACA	120
AGCTRCTCTY	CGAGGGTGCA	GGTAGGCAAC	CCTGGAGACA	TGACKCTGGA	GGGMCGATTA	180
CTTTGAGYAC	GAGGTAAARC	TGAACAAGTT	GTSCTTCCTG	ANACAGTWCC	ACCTTGGTGT	240
CTTCTATRCC	TTCGTGAAGC	TCAAGGAGCA	GGAGTGTCKC	AACATCGTGT	GGATCGCTGA	300
ATGTATCTRC	CAACGCMSS	GCRMMYCSMA	MSWCAWCCWY	ATTCTSTRTC	CTKSYAASGT	360
CWCAMTGAAN	CWAGCCCTCT	CAATTGCACT	GCACTGTGTG	TGTGTGTGTG	TGTGTTGTGC	420
GTGTGTGTTG	CGTGTGTGTG	TATGTGGTCT	GTGACAAGCC	TGTGGCTCAC	CTGGTCGACG	480
GCCTCTTTGG	CCCTCGAGAC	A				501

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

CCNCCGTTTG	TTGTNNTGCA	CCAAANANCC	NCNAATTGNC	CANANAAAAT	TGATGGGAAG	60
ACCACTTAAA	GGGGGGGNAN	TTAGGCGGGN	CAAAGACAAG	GCACCCNACA	AGATGTCGTT	120
TGTTCCAGAG	CTGATTGAGG	GGTATCTCGG	AAGNAACACN	GAAACTTTTT	TCCTTCCTTC	180
AATTCAACGC	ACACTACTCT	CTAATGAGCN	NCGGAATACG	GCCTTCCTTC	CAGTTACTTG	240
AATNTGAAAT	AAAAAAAAGT	TTGCTGTCTT	GCTATCCAAG	TATAAATAGA	CCTGCAATTA	300
TTAATCTTTT	GTTTCCTCGT	CATTGTTCTC	GTTCCCTTTC	TTCCTTGTTT	CTTTTCTGTC	360
ACAATATTTT	AAGCTATACC	AAGCATACAA	TCAACTCCAA	GCTCGGAATT	CGGCCAAAGA	420
GGCCGTCGAC	GAACCACCGG	CTGAAAATTG	GCTTCTTCAA	CCAGCAGTAT	GCAGAGCAGC	480
TGCGCATGGA	GGAGACGCCC	ACTGAGTACC	TGCAGCGGGG	CTTCAACCTG	CCCTACCAGG	540
ATGCCCGCAA	GTGCCTGGGC	CGCTTTGGCC	CTCGAGACA			579

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

CCTGCNCCAA	NANTTCCNAA	CCNAATAACC	CAANAANACC	AATCCNNNCT	CCANCTGGGG	60
AATTCGGNCC	NAAGAGACCG	TTGTNNTGAT	GACAAGTCGA	AGCCAANAAT	ACCATNCAAC	120
CTGCTCCCAA	TCATGCAGGN	TNCNGCCACT	GCTGCCCTTG	CCGTCCCTCC	TCTGCACCAT	180
GGCTNCTCCT	GCAACCAGGT	CCTCTCTGCA	CCACTTGCTG	CTGANACGCC	GACCGCCTGC	240
TGCTTCAGCT	ACACCTCCCG	ACAGATTCCA	CAGAATTTCA	TAGCTGACTA	CTTTGAGACG	300
AGCAGCCAGT	ACTCCAAGCC	CAGTGTCTATC	TTCCTAACCA	AGAGAGGCCG	GCAGGTCTGT	360
NNTGACCCCA	GTGAGGAGTG	GGTCCAGAAA	TACGTGAGTG	ACCTGGAGCT	GAGTGCCAGA	420
GGGGTCCAGA	AGCTTCGAGG	CCCAGCGACC	TCACTGGGCC	CAGTGGGGAG	GAGCAGGAGC	480
CTGANCCCTG	GGAACATGCG	TGTGACCTCT	ACAGCTACCT	CGTCGACGGC	CTCTTTGGCC	540
CTCGAGACA						549

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```
GTCGACCTCC CAGGTCATTA GGAAGCTGGT CATGGAACCC ACCTTCAAGC CCTGGCAGAT      60
GAAGACTCAC TTCCTGATGC CCTTCCCGGT GAATTACGTG GGTGAATGCA TCCGAAGTGT      120
CCCCACACG GACCCAGATC ATGCCAGTCT TAAAATCCTT GCACGTTTGA TGAAGTCCAA      180
ATTCTTGTCAT ACAGAAATTC GTGAAAAAGG CGGTGCTTAT GGTGGAGGCG CAAAACTCAG      240
CCACAATGGG ATTTTCACCC TTTACTCTTA CAGGGACCCA AATACAATAG AGACGCTCCA      300
GTCTTTTGGG AAGGCTGTCG ACTGGGCTAA GTCTGGAAAA TTCACACAGC AAGACATCGA      360
CGAAGCCAAA CTTTCTGTCT TCTCAACCGT AGATGCTCCT GTCGCTCCTT CAGACAAAGG      420
AATGGACCAC TTCTTGACG GCCTCTTTGG CCCTCGAGAC A                      461
```

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 511 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```
GTCGACAATA ATTCCACCTC ACCAGGATAA TACCCATCCT TCAGCACCAA TGCCTCCACC      60
TTCTGTTGTG ATACTGAATT CAACTCTAAT ACACAGCAAC AGAAAAATCA AACCTGAGTG      120
GTCACGTGAT AGTCATAACC CTAGCACTGT ACTGGCAAGC CAGGCCAGTG GTCAGCCAAA      180
CAAGATGCAG ACTTTGACAC AGGACCAGTC TCAAGCCAAA CTGGAAGACT TCTTTGTCTA      240
CCCAGCTGAA CAGCCCCAGA TTGGAGAAGT TGAAGAGTCA AATCCATCTG CAAAGGAAGA      300
CAGTAACCCCT AATTCTAGTG GAGAAGATGC TTTCAAAGAA ATCTTTCAAT CCAATTCACC      360
GGAAGAATCT GAATTCGCCG TGCAAGCGCC TGGGTCTCCC CTAGTGGCTT CCTCTTTATT      420
AGCTCCTAGC AGTGGCCTTT CAGTTCAAAC TTCCCACCAG GGCTTTACTG CAAACAAGC      480
ACGGTCAACG GCCTCTTTGG CCCTCGAGAC A                      511
```

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 483 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```
GTCGACAGTC CAAAGTCTCA AGACAGTTAT CCTGTTAGTC CTCGACCTTT TAGTAGTCCA      60
AGTATGAGCC CCAGCCATGG AATGAATATC CACAATTTAG CATCAGGCAA AGGAAGCACC      120
GCACATTTTT CAGGTTTGA AAGTTGTAGT AATGGTGTA TATCAAATAA AGCACATCAA      180
TCATATTGCC ATAGTAATAA ACACCAGTCA TCCAATTGA ATGTACCAGA ACTAAACAGT      240
ATAAATATGT CAAGATCACA GCAAGTTAAT AACTTCACCA GTAATGATGT AGACATGGAA      300
ACAGATCACT ACTCCAATGG AGTTGGAGAA ACTTCATCCA ATGGTTTCCT AAATGGTAGC      360
TCTAAACATG ACCACGAAAT GGAAGATTGT GACACCGAAA TGGAAGTTGA TTCAAGTCAG      420
TTGAGACGCC AGTTGTGTGG AGGAAGTCAG GCCGCGTCTA CGGCCTCTTT GGCCCTCGAG      480
ACA                      483
```

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GTCGACGAGG TGGTGATCAT GGAAGACGCC CCTGACTATT ATGCAGTGGG AGACATTTTC      60
AGCGAGATCT CAGACATTGA TGAGACAATT CATGACATCA AGATCTCTGA CTTTCATGGAG      120
ACCACCGACT ACTTCGAGAC CACTGACAAT GAGATAACTG ACATCAATGA GAACATCTGC      180
GACAGCGAGA ATCCTGACCA CAATGAGGTC CCCAACAACG AGACCACTGA TAACAACGAG      240
AGTGCTGATG ACCACGAAAC CACTGACAAC AATGAGAGTG CAGATGACAA CAACGAGAAT      300
CCTGAAGACA ATAACAAGAA CACTGATGAC AACGAAGAGA ACCCTAACAA CAACGAGAAC      360
ACTTACGGCA ACAACTTCTT CAAAGGTGGC TTCTGGGGCA GCCATGGCAA CAACCAGGAC      420
AGCAGCGACA GTGACAATGA AGCAGATGAG GCCAGTGATG ATGAAGATAA TGATGGCAAC      480
GAAGGTGACA ATGAGGTCAC GGCCTCTTTG GCCCTCGAGA CA                      522

```

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GTCGACAGAT CATGTTGGAA GAGCCCCCAG TAGCAAAAGT GTTAGAGCCT TCAGAAACCC      60
TTGTGGTATC ATCAGAGACA CCTACTGAGG TGTACCCTGA GCCAAGCACA TCAACAACAA      120
TGGATTTTCC AGAGTCATCT GCAATTGAAG CGCTAAGATT GCCAGAGCAG CCTGTAGACG      180
TACCATCGGA GATTGCAGAT TCATCCATGA CAAGACCGCA GGAGTTGCCG GAGCTGCCTA      240
AGACCACAGC GTTGGAGCTG CAGGAGTCGT CGGTGGCCTC AGCGATGGAG TTGCCGGGGC      300
CACCTGCGAC CTCCATGCCG GAGTTGCAGG GGCCCCCTGT GACTCCAGTG CTGGAGTTAC      360
CTGGGCCCTC TGCTACCCCG GTGCCAGAGT TGCCAGGGCC CTTTCTACC CCAGTGCCTG      420
AGTTGCCAGG GCCCCCTGCG ACAGCAGTGC CTGAGTTGCC AGGGCCCTCT GTGACACCAG      480
TGCCACAGTT GTCGCAGGAA TTGCCGTCAA CGGCCTCTTT GGCCCTCGAG ACA                      533

```

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

CCACCAGACA TAAAGTACTG ACATGATCAG AGGAATCATC AGCAACTGCA TNTCCATTGC      60
TAAGCCAGTA ATCAGATGC AAATCCAGTT AAAGAGGAGC ATGAATAAAT AGTCTGCTGG      120
CCTCCCATCA AAAGCTCCTG TTTCAAGTCG CGTAGAATAC TGATATAAGA AATATANATT      180

```

GACCAAATAA	AGAAATCCAG	TTCCTGGACC	CACAGGGAAA	TAAAAGGTGG	CAGTGATTGN	240
CCTCCAAATC	TGAAAGCGAT	ANAGGAAGGC	TTCGGGCCAG	AGGAAGAGGT	AGGCCGGGCT	300
GATGAGGCCG	AGTTTGCCGA	CCAAGGGCAC	GGNGACGGTG	GCGGCGAACC	AATAGCGCGT	360
GATCGCCGGG	ATGCTCCTGA	ACCAGTCTCC	GATGTCCGAC	ATCTTCGACC	CACAGGTAGC	420
CAAGATGCAC	AAGACCGCCC	GACTCCCCGC	GCCGACCCCC	TCACGACGCG	GCCGGCTCCG	480
CGACTGTTAG	GTGTCTAGGT	GGAAGCCGCG	TCGAC			515

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

ATNCNCGGAGN	CCCAGATGCT	GTGGGCCATG	ATCGCANNTT	GNNTGAGAGA	ATTGGCAGAA	60
NCAGANTACT	CCTAGCNAGA	NCAGTATTNT	GTGTNACTCT	GGAGAATTNC	AGTGATGNAA	120
AAAAANAGAC	CNGTNCAAGT	AAGTCCAGCG	AAAAGCATGC	CCACATGGAT	GAANTGGATG	180
ATGAAGATGA	TGCCNNCCNT	GNGGNCAGCA	GGAACCTCTN	TNNCTGCGNG	NCNACTCNTG	240
NTGNTGTAGA	TGANGCTGGT	NAAGCNNANC	AGTCTGNTGA	GNCTCCTCGA	GTCTGATGGA	300
TCTNATGAGC	AGANCGNTGA	TTCGTCTGCC	GCCGTNCTCC	TTNGAGCCCN	CNAGACA	357

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

CTTGATAGATG	GAGCGGGGAG	NCAGACTNCT	GGGNGCTGCG	TGANTGCTGA	CGTGAGATGG	60
ATTAATTAAT	GGCNAGCAAG	NATGGNGNCT	NCGAGCCCCT	CCCTGNCCGT	NCCTNCCAGN	120
NGTGGCAATN	CGGTACGTGG	NCAGACTTCA	GGNAGAAAAA	AAAAAANGG	GNCNCGTAAG	180
CTGCTGCGGG	NNCAGCAGCT	TGAGACTGNC	AAGTGACTCA	GATGCAGAGT	CAGACTNTCG	240
GGCTAGCTCT	AACAACCTCN	CCGTCTCCAA	CACCAGCACC	GAGGGCTTCG	GGGACATCAT	300
GTCTTTGACC	AGCAGCCTCT	ATCGGAACCA	CAGTACCAGC	TTCAGTCTTT	CAACCTCAC	360
ACTNCCGTCTG	NCGGCCTCNT	TGGCCTTTNG	AGGCGA			396

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

GTGACCCCCA	GATGAAATGT	CATGGCAAAT	TTGATAAAAA	CCAAGAGGGA	GTGAAACTGA	60
------------	------------	------------	------------	------------	------------	----

CGCTGGGGGA	GGGAAGGGTC	AAGTCGAGGG	AAGGTGAAAC	CAAAAGGCAC	TGAGCATGCG	120
TGGTGGGGCA	GGGAAGGACA	CCATCACTCC	AGAGACAGTA	TGGTAACAAA	GGGACAGGAA	180
TGGTCCAGGC	CAGCTTCAGG	CTCTTCAGAA	GCCAGAGAGA	TGTCCAAGTC	TACCAAACCG	240
AGTTCTCCAA	GGCTTTTCAA	GAAATGGGAT	TTGCTTGCAA	GATGAATGAG	GGAGGAGGTC	300
CCATGGCTTC	TAAGAGATCA	ACCCAAGTCT	TCCAATACTC	ACTGCTAAGT	CCCACCTGGG	360
TCCCCCAGAG	CCAGGAAGCT	CCCTGGTGGC	AGGTCCCCCT	CTTGCCCTCA	CGGCCTCTTT	420
GGCCCTCGAG	ACA					433

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

GTCGACAAAA	TAGTTCTGTT	AAAGAATACC	GAATGGAACT	TCCATCTTCG	TTTTCAGAAG	60
ACATGTCAAA	TATCAGGTCA	CAGCATGCAG	AAGAACAGTC	CAACAATGGT	AGATATGACG	120
ATTGTAAAGA	ATTTAAAGAC	CTCCACTGTT	CCAAGGATTC	TACCCTAGCT	GAGGAAGAAT	180
CTGGGTTCCC	TTCTACTTCT	ATCTCTGCAG	TTCTGTCTGA	CTTAGCTGAC	TTGAGAAGCT	240
GTGATGGCCA	AGCTTTGCCC	TCCCAGGACC	CTGAGGTTGC	TTTATCTCTC	AGTTGTGGCC	300
GTTCCAGAGG	ACTCTTTAGT	CATATGCAGC	AACATGACAT	TTTAGATACC	CTGTGTAGGA	360
CCATTGAATC	TACAATCCAT	GTCGTCACAA	GGATATCTGG	CAAAGGAAAC	CAAGCTGCTT	420
CTTGGTCAAC	GGCCTCTTTG	GCCCTCGAGA	CA			452

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

CTNAAANTTA	CCATCACAGT	TNCTACAATC	GGCTCTTTCC	AATTTGGCNA	CAACNCTGGG	60
TCATCAATGC	TCCTGAGAAG	ATCATAAAGG	AATTTATCAA	TAAAACTTTG	TCGGACAAGG	120
GAAATNCCCC	ACCCTCTGAG	GTGCTGCTCA	CGTCTCTCTG	GTCCTTGCTCT	GTGACCATAT	180
TTTCCGTCGG	GGGNATGATC	GGCTCCTTTT	CCGTCGGACT	CTTCGTC AAC	CGCTTTGGCA	240
GGCGCAANNC	AATGCTGATT	GTCAACCTGT	TGGCTGTCAC	TGGTGGCTGC	TTTATGGGAC	300
TGTGTAAAGT	AGCTAAGTCG	GTTGAAATGC	TGATCCTGGG	TCGCTTGGTT	ATTGGCCTCT	360
TCTGCGGACT	CTGGTCGACG	GCCTCTTTGG	CCCTCGAGAC	A		401

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

GTTGAGAGCA	GCATGTTTNN	NCCACTGAAA	CTCATCCTGC	TGCCAGTGTT	ACTGGATTAT	60
TCCTTGGGCC	TGAATGACTT	GAATGTTTCC	CCGCCTGAGC	TAACAGTCCA	TGTGGGTGAT	120
TCAACTCTGA	TGGGATGTGT	TTTCCAGAGC	ACAGAAGACA	AATGTATATT	CAAGATAGAC	180
TGGACTCTGT	CACCAGGAGA	GCACGCCAAG	GACGAATATG	TGCTATACTA	TTACTCCAAT	240
CTCAGTGTGC	CTATTGGGCG	CTTCCAGAAC	CGCGTACACT	TGATGGGGGA	CATCTTATGC	300
AATGATGGCT	CTCTCCTGCT	CCAAGATGTG	CAAGAGGCTG	ACCAGGGAAC	CTATATCTGT	360
GAAATCCGCC	TCAAAGGGGA	GAGCCAGGTG	TTCAAGAAGG	CGGTGGTACC	GCATGTGCTT	420
CCAGAGGAGC	CCAAAGAGCT	CATGGTCCAT	GTGGGTGGAT	TGATTCAGAT	GGGATGTGTT	480
TTCCAGAGCA	CAGAAGTGAA	ACACGTGACC	AAGGTAGAAT	GGATATTTTC	GTCGACGGCC	540
TCTTTGGCCC	TCGAGACA					558

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

GTGGAGAAAA	TTGCTGCTGA	GAAGGACATT	TTGAAGGTTT	TGTTGGCTGA	AAAAGCTGTT	60
TCTGGAATCA	CCCCTAGATC	TTTCTTGAAG	ACTTGAATTA	GATTACAGCG	ATGGGGACAC	120
AGAAGGTCAC	CCCAGCTCTG	ATATTTGCCA	TCACAGTTGC	TACAATCGGC	TCTTTCCAAT	180
TTGGCTACAA	CACTGGGGTC	ATCAATGCTC	CTGAGAAGAT	CATAAAGGAA	TTTATCAATA	240
AACTTTGAC	GGACAAGGGA	AATGCCCCAC	CCTCTGAGGT	GCTGCTCACG	TCTCTCTGGT	300
CCTTGCTGT	GGCCATATTT	TCCGTCGGGG	GTATGATCGG	CTCCTTTTCC	GTCGGACTCT	360
TCGTCAACCG	CTTTGGCAGG	CGCAANTCAA	TGCTGATTGT	CAACCTGTTG	GCTGTCACTG	420
GTGACTGCTT	TATGGGACTG	TGTAAAGTAG	CTAAGTCCGT	TGAAATGCTG	ATCCTGGGTC	480
GCTTGGTTAT	TGGCCTCTTC	TGCGGACTCT	GGTCGACGGC	CTCTTTGGCC	CTCGAGACA	539

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

GTTGACCCCA	TTTTCCACCA	CCAAGCAAGC	AGAGCCTGTT	GTTTTGTCCA	AAATCAAAAC	60
TGCACATCCA	CAGAGCAGAG	ATCTCAAAGA	TTATGCGAGA	ATGTCAGGAA	GAAAGTTTCT	120
GGAAGAGAGC	TCTGCCTTTT	TCTCTTGTA	GCATGCTTGT	CACCCAGGGA	CTAGTCTACC	180
AAGGTTATTT	GGCAGCTAAT	TCTAGATTG	GACCATTGCC	CAAAGTTGCA	CTTGCTGGTC	240
TCTTGGGATT	TGGCCTTGA	AAGGTATCAT	ACATAGGAGT	ATGCCAGAGT	AAATTCCATT	300
TTTTTGAAGA	TCAGCTCCGT	GGGGCTGGTT	TTGGTCCGTC	GACGGCCTCT	TTGGCCCTCG	360
AGACA						365

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```

GTCGACCTCG GTAAATGCCT CAGTTCCTCCCT CCCAGATGGA GGCATCGTTG TGAGAGTCTG      60
ATTGGGAGGG GAATATGAAA ATGTTTTTCGG AAGATAAAAG TACTACACAG ATGTGAGGTG      120
GTTTTGCCTT GGAAGAAAGT GCTCCTTAGA TGTGTCTGGA TGTATGCAG AGTGATCGTG      180
GCGTGTCAAT CTTTCTTTTG GGTGTTTTGC AGCCTGAGAC ATAAGGTAAT TGTCAGAAAA      240
GGGAGACGTA GAAGTGTGGA TCTGTGGAAG CTCACTCTTA ACAAGAATTC TAAGATGCAC      300
ATTTAAGTAC TTGCCATGAC GTGAGGTGTT GTCACACGTC AACCTGAGA TGCTGTCAGT      360
GTCCCAGGGG ACTTGACATT TATGTTACCC AGGAATGACT GTGTAAATGT GCAGGTGCAG      420
GCCGGGCGCC GTGGCTCAGT GCCTGTAATC CCAGCACTTT GGGAGCCCCG TCGACGGCCT      480
CTTTGGCCCT CGAGACA

```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

GTAGACANCA NTAGAAAAAC AAAAATCTCA TAATGCAAAA GCATCAAGTG TTTGACTCTG      60
AGAAGCGCCT TGTATGCCCA GTTACTCTCG TTCTCCCTCA GCTCTTGCTT GTGCTTCTCC      120
ACCTGCCATT CCACTTTGGC CTGGTACTGC CTGTAGTCTT CCTGGCAGGC CCCAGCTCCA      180
GTTCTTTGGA GCAGCTGGGC ATCCAAGAAG AGGTCATTGC TGTGAAGGA GCCCTCTCGC      240
TCCCTCCCCA GCCTCTCAAT CACAGCCAGG AGCTCTGCCT GCTGCTGCCT CTGCTCCTCC      300
ACAGAGCCCC AGTTGTTGAA GGCACAGTAC CTTCTCTCAC ACTCCCGCGC CAGGTCTTTC      360
AGGCTGCAGT TGTCCGTGTT TGCTACATAG TCATCCAGGG CCTGGCCCCG TCGACGGCCT      420
CTTTGGCCCT CGAGACA

```

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

CCTGCNCNAA ANNANTCCAA GCNAANNCCC AAACAATCCC AATNCCNACC CCAAGCTNGG      60
GAGTTCGGCC CAAAAGAGGC CCNCGAAGC TAGATTNCAG TGAGCCAAGA TCGTNCCACT      120
GCACNCCAAG CCNGGGCANC CAAGAGCGAA ACTCCGTCNC CNCNNANAA AGAGAAAATT      180
AGCCGGGCGT GGTGGCGTTA ATCCCANCTA CTTGTGAGGN TAAGGGAGGA GAATTGCTTG      240
AACCCAGGAG GCAGAGGTTG CAGTGAGCTG AGATCACGCC ATTGCACTCC AGCCTGGGCC      300
ACAAGAGCAA GACTCCATCT CCCAAAAAAA AAAAAAATAG CGTCAGAAAA ATGTCCTTGT      360
ATGCCATTTT CTCATTTTT TTGACATTTT GCCCGACTTT TGTCTTTGTT TCAGGGAAAT      420
CGTGAACAC ATGTTCCAGC ACTTTAAAAC ACAGATCTTT GGGGATCGGA AGCCCGTGTT      480
TGACGGCAGG GTCAACGGCC TCTTTGNCCC TCGAGACA

```

(2) INFORMATION FOR SEQ ID NO:72:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

AAACCAAAAC TCATGTTGCT TGNCCCCCA TCGTCGTCTC AAGTGNGGGC GANNACTTTC      60
CTGTTTGGAG CCCTCCGTCC NAACNNCTAA CACAATGTTT TTTCNCAAAC GTTCTACNAA      120
CGCCTGCGAC NAGNCCAGGG AGGGGGTGCT GTGNATCCTC AGCNACGACA CGCTGCAGTA      180
CTGCGACTTC TTGGGCTCCG GGGCGGCCAT CTGGGTCACC ATNCTGTGNA TGGCACGGCT      240
CAAGACAGTC CTGAAATACG TGCTGTTTCT TCTGGGTACA CTGGTCATCT CCATGTCCTT      300
GCAGCTGGAC CGCAGGGGCA TGTGGAACAT NCTGGGGCCC TCCCTCTTTG CCTTCGTGAT      360
CATGGCCTCC ATGTGGGCTT ACCGCTGCGG GCACCGGCGC CAGTGCTACC CCACCTCGTG      420
GCAGCGCTGG GCCTTCTACC TCCTGCCCGG CGTCTCTACG GCCTCTTTGN CCCTCGAGAC      480
A                                                                                   481

```

(2) INFORMATION FOR SEQ ID NO:73:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 513 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```

GACCTCCAN TAATAANCCT TTTGTTTCCC TCGTCNNTGT TNGTCCGTTT CCCTTTCTTN      60
CCCTTGTTTC NNTNTCTGTC ACCAATATTT CCAANCTAAT ACCCAAGCAA NACAATCCNA      120
ACTCCAAGCT CGGGAATTCT GCCCAAAGAG ACCGTAGGCC GAAACCCACC GGANGGAACC      180
ATCTCACTGT GTGTAAACAT GACTNCCAAG CTGNCCGTGG CTCTCTTGGC AGCCTTCTCTG      240
ATTCTGTCAG CTCTGTGTGA AGGTGCAGTT TTNCCAAGGA GTGCTAAAGA ACTTAGATGT      300
CAGTGCAATA AGACATACTC CAAACCTTTC CACCCCAAAT TTATCAAAGA ACTGAGAGTG      360
ATTGAGAGTG GACCACACTG CGCCAACACA GAAATTATTG TAAAGCTTTC TGATGGAAGA      420
GAGCTCTGTC TGGACCCCAA GGAAACTGGG GTGCAGAGGG TTGTGGAGAA GTTTNTGAAG      480
AGGGCGTCGA CGGCCTCTTT GGCCCTCGAG ACA                                       513

```

(2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 519 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

CAANTAATAA ANCTTTTGTT TCCCTCGNCA TTGTNNTCGT TCCCCTGTCC NGCCTTGTTT      60
CCNNGTCTCT GCACCAATAT TTCCAAACCN AATACCCAAG CATACAATCC NNACTCCAAG      120
CTNGGAATTC GCCCANAGAG ACCGTCGNNG GAAGAANTTG NCTGGAACT TGTTCATGGT      180

```

GATATATACC	GTCTCCAAG	AAANGGGATG	CTGCTATCAG	TCTTTCTAGG	AGCCGGGANA	240
CAGATATTAA	TTATGACCTT	TGTGACTCTA	TTTTTCGCTT	GCCTGGGAGT	TTGTGCACCT	300
CCCANCCGAG	GAGCGCTGAT	GACGTGTGCT	GTGGTCCTGT	GGGTGCTGCT	GGGCACCCCT	360
GCAGGCTATG	TTNCTGCCAG	ATTCTATAAG	TCCTTTGGAG	GTGAGAAGTG	GAACACAAAT	420
GTTTTATTAA	CATCATTTCT	TTGTCCTGGG	ATTGTATTTG	CTGACTTCTT	TATAATGAAT	480
CTGATCCTCT	GGTCAACGGC	CTCTTTGGCC	CTCGAGACA			519

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

CGGGCCCAAA	GACANGCANN	CCNACAAGAT	GTCGTTGTTT	CAAGAAGCTG	ATNGAGGGGT	60
ATCTCGGAAG	CACACGGAAA	CTTTTTCTT	CCTTCAATTC	NACGCACACT	AACTCTCTAA	120
TGAGCAANCG	GTATACGGCC	TTCTTCCAG	TTACTTGNAT	GTGAAATAAA	AAAAAGTTG	180
CTGTCTTGCT	ATCAAGTATA	AATAGACCTN	CAATTATTAA	TCTTTGTTT	CCTCGTCATT	240
GTTCTCGTTC	CCTTTCTTCC	TTGTTTCTTT	TTCTGCACAA	TATNTCAAGC	TATACCAAGC	300
ATACAATCAA	CTCCAAGCTC	GGAATTCGGC	CNAAGAGGCC	GTCGACCGTT	CGTTATCGGA	360
ATTAACCAGA	CAAATCGCTC	CACCAACTAA	GAGCGNCCAT	GCACCACCAC	CCACGGAATC	420
GAGAAAGAGC	TATCAATCTG	TTGAAGAACA	TGCCCCGCTT	CTTGTCATC	ATCATGGTGT	480
ACACGNCCTC	TTTGNCCCTC	GAGACA				506

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

TTCCTTGTTT	CCTTTTCTT	NCCCCAATAT	TTCCAAGCTA	ATACCCAAGC	AATACAATCC	60
NACTCCAANC	TCGGGAATTC	GGCCACAGA	GACCGNTGAC	CNTGTAAATG	AGTGAGGCAG	120
GAGTCCCGNG	GAGGTTAGTT	GTGTCAATAA	AAATGATTAA	GGATACTAGT	ATAAGAGATC	180
AGGNTCGTCC	TNTAGTGTTG	TGTATGGNTA	TCATTTGTTT	TGAGGNTAGT	TTGATTAGTC	240
ATTGTTGGGT	GGTGATTAGT	CGGTTGTTGA	TGAGATATNT	GGAGGTGGGG	ATCAATAGAG	300
GGGGANATAG	AATGATCAGT	ACTCCGNACG	GTAGGCCTAG	GATTGTGGGG	GCAATGAATG	360
AAGCGAACAG	ATTTTCGTTT	ATTTTGGTTC	TCAGGGTTTG	TTATAATTTT	TTATTTTAT	420
GGNCTTTGGT	GAGGGAGGTA	GGTGGTAGTT	TGTGTTTAAT	ACAAAAAGTT	GGGTCGACGN	480
CCTCTTTGNC	CCTCGAGACA					500

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 581 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

AACCGGATTC	GGNCCNAAAG	AGACCGGTTG	CCCAAACTT	TCTGCTGAGA	AGGACATTTT	60
GGAGGGGNTT	TGTTGGGCTG	AAAAAAGCT	GTTTCCTGGG	AATNNAACCC	CCNAGANCTT	120
TCTTGAAGAC	NTTGAATTAA	GATTACCAAN	CGATGGGGGA	CACAGGAAGG	TCCACCCCCA	180
NGCTCTGATA	TNTGCCATCA	CAGTTGCTAC	AATCAGCTCT	TTCCAATTTG	GCTACCAACA	240
CTGGGGTCAT	CAATGCTCCT	GAGAAGATCA	TAAAGGAATT	TATCAATAAA	ACTTTGACGG	300
ACAAGGGAAA	TGCCCCACCC	TCTGAGGTGC	TGCTCACGTC	TCTCTGGTCC	TTGTCTGTGG	360
CCATATNTTC	CGTCGGGGGN	ATGATCGGCT	CCTTTTCCGT	CGGACTCTTC	GTCAACCGCT	420
TTGGCAGGCG	CAATTCAATG	CTGATTGTCA	ACCTGTTGCG	TGTCAGTGGT	GGCTGCTTTA	480
TGGGACTGTG	TAAAGTAGCT	AAGTCGGTTG	AAATGCTGAT	CCTGGGTCGC	TTGGTTATTG	540
ACCTCTTCTG	CGGGTCGACG	ACCTCTTTGG	CCCTCGAGAC	A		581

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GTCAACCTGG	GAGGCTCTCC	CCCACCTTCT	TTCAATCTCT	TCTCAAACCTC	TGCATCCTCA	60
GAGGGGCCTT	GCCTGATTGG	CCTTCTTAAA	ATGGATCTGC	CCCACCCAC	TTTGTACTTG	120
CTGTGCCCTC	TGCTTTCAGG	CGTGTCTCA	AACAGGATCT	CAACAAGGCC	TCCCCTGACC	180
ACACTTTAAA	ACTGCATGCC	CTATATATAC	CCCATCTCTC	TTATTTTAT	TTGTCTCCCT	240
AATGCTTATC	CCCAGTATAC	TCTGTTTATT	GTCTGTCTCT	CCTCACTACA	AAATAAACTC	300
CCCAAGGCCT	AGAGTTTTTT	CTGTCTTGTC	CCTGCTATAT	ACCAGTGCTT	AGAACAGCGC	360
CCTGCACAGA	ATAGAGGCCC	AATTCAATAT	GGATTCGCTA	CCACTACATC	CTATTTGTTT	420
CCTTCCCATC	ACTTTTCGAA	CACTCATCTA	TTCAGCTCTG	CTGACCTGTT	TCACATCTGG	480
ATCCTGTATA	GCAACGTCGA	CGGCCTCTTT	GGCCCTCGAG	ACA		523

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GTNGACTGAT	ACTCGAGTAC	CTGGATCAGC	GGCTGAAAGC	TGCAGAGAAC	AAGTTTGCCA	60
AGTGCCCTCAT	GACCTGTCTC	AAATGCTGCT	TCTGGTGCCT	GGAGAAGTTC	ATCAAATTCC	120
TTAATAGGAA	TGCCTACATC	ATGATTGCCA	TCTACGGCAC	CAATTTCTGC	ACCTCGGCCA	180
GGAATGCCTT	CTTCCTGCTC	ATGAGAAACA	TCATCAGAGT	GGCTGTCCTG	GATAAAGTTA	240
CTGACTTCCT	CTTCCTGTTG	GGCAAACCTC	TGATCGTTGG	TAGTGTGGGG	ATCCTGGCTT	300
TCTTCTTCTT	CACCCACCGT	ATCAGGATCG	TGCAGGATAC	AGCACCACCC	CTCAATTATT	360
ACTGGGTTCC	TATACTGACG	GTGATCGTTG	GCTCCTACTT	GATTGCGTGC	ACGGCCTCTT	420
TGGCCCTCGA	GACA					434

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 573 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```
GAGGCCCTC AANTTCTGCC ATTTTATTTT ATTTTITTTGA NCTGGAGTNT TGCTCTGTAT    60
CCCAGGCTGG AGTGCACTGG CGCAATCTCG GCTCACTGCA AGNTCCTCCT CCCGGGTTC    120
CGCACATTCT CCTGCTTCAG CCTCCCTAGT AGCTGGGACT ACAGGAGCCC GCCACCACGN    180
CTTGTTAATT TTTTGTGAT TTTTAGTAGA GACAGGNTTT CACTNTNTTA GTCAGGATGG    240
TCTCATNTT CTGANGTCAT GATCCGCCCA CCTCGGCCTC CCAAAGTGCT GGGAKTACAG    300
-GMCGGARCCA CCGCGCCCGG CCTATTTTTT GGKGGTTTNA WWTCTGGGTG ACTTGTACAG    360
AGGAAGTTTT TGTTKTTTTT TTTCCANTGA AAAGATCTGG CCANAATAGT GGGNNTGTCA    420
AAGTATCTCT TTGCAGNTT AATTTCATT TTTCCANTGA CTAAGATGAT GTTGTGCAAT    480
TTTTTCAGAN ACTGTNTGCT ATCTGTATAT CATCTCTTTT TTTTITTTT CTTTGGGAAGT    540
GGATCCGGTN CGNCTCTTT GCCCTCGAG ACA    573
```

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 468 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```
GAANCCCCAT CCACTTCNCG GGAGGGGGGA GAGCGCGNG ACGGTCTCG CTCCCTCGGC    60
CCCGGGATTC GGCGGGTGCA GNTGCCGAT CCTTCAGCGT CTGNATCTCG GCGTCGCCCC    120
GCGTACCGTC GCCCGGCTCT CCGCCGCTCT CCCGGGGT CCGGGCACTT GGGTCCCACA    180
GTCTGGTCCT GCTTCACCTT CCCCTGACCT GAGTAGTCRC CATGGCACAG GTTCTCAGAG    240
GCACTGTGAC TGACTTCCCT GGATTGATG AGCGGGCTGA TGCAGAACT CTTCGGAAGG    300
CTATGAAAGG CTTGGGCACA GATGAGGAGA GCATCCTGAC TCTGTTGACA TCCCGAAGTA    360
ATGCTCAGCG CCAGGAAATC TCTGCAGCTT TTAAGACTCT GTTTGKCAGG GATCTTCTGG    420
ATGACCTGCG GAAGTGGATC CGGTCGGCC TCTTTGGCCC TCGAGACA    468
```

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```
GAACCGGATC CACTTCCGGG AAAACCTCGG ATTAGCAAGC AATAAAACA TGACCTCACT    60
CTTCCTCAAA GGAGCCCCTG GTCTTCCCTG TGTGACTCAG TTCTTTCCAT CTGTTTGTCC    120
CGCTGCAAGC CTCTTTCTGC GCTGACTGTG ACATCGGAAC GTGGCCTTCC TGTACCCCC    180
TCCGTGCCAC GCACTGAAGG CCACCCCCC CCACCTGGGA AACTAAGAAC TGGATATTTT    240
GCCTCATTCA CTTGTACTGT AACAAATGTAT ATAATTTGGT TGGTATTTC AATTATTAAT    300
TTTAAGAAGC CTATTTTACT AGTGTTTAT ATGAACAAAG TACTGCAGAA GTTAAACCTG    360
```

TGTTGTATTT TTTCTGAGAT GTTTTGCTTT AAGAGATACT TTTTGCTCAG TTTTATATG 420
CCAGGAAGTG GATCCGGTTC GGCCTCTTTG GCCCTCGAGA CA 462

(2) INFORMATION FOR SEQ ID NO:83:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GGCCCGATNC ACTTCCGTGG NAAGAGCCTG CAATCCCNCC TACTCAGGAG GCTGAGGCAG 60
 GAGAATCGCC CGAACCCGAA AGGTGGAGGT TGCAGTGAGC TGAGAATGTG CCACCGCACT 120
 CCAGCCTGGG TGACAGGGLG AGACTCTCTC AAAGTAAATA AATTAAAAAA ATTTAANAAG 180
 ATCATCAAAG AACAAACGAA ATTTTGTTAT TTCAGTAAGT CAATTTAAAC AATAGAAGCC 240
 AATTCTACCA CCAGAGGARC RMMATAAAAT CTCATTATTA ATTGAGGGTG GCTTCTCTMC 300
 CAGGTGRRAA ATTCTATAGR CAGGTATTTT GKTTACTACT GACAGGTAAT AAGATTGTTT 360
 CTWAGGTAAA GGTAACCCCA GCAACACAAC ATTCTTCACT TTTGTTTAAAT GAACCTCNAN 420
 ATTCATCATA TTACTIONTAT TTGCTAGCAT GCTTTTTGTG GAAGTGGATC CGGTTCCGCC 480
 TCTTTGGCCC TCGAGACA 498

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

CGASCCGGAT CCACTTCCCC CTTACGTATC ATTTGTCACA CAGGCCTCAG CCTGAAAAAA 60
 AATTCCAGTT TTTGTGTATT GCAGTTCCCG TATGCTATTG TCAACCAACA GTTTCCGTGA 120
 TCCTTGTAAGT CTAATGAGTT TGGATGCATC TATGTTCCCTA CTGGATCCAC TGTCCCGTCT 180
 CGGCAGCTCT TCCTCACTGC TGCTACTCTT TTCTGGACAC TCCTTTTTTTT CCATTTGTCA 240
 AATGTGGTAT TTATGTCTTT ACTGTATCTT TTTTACCCAT GTGAGTTTCA GGAGCCCCAG 300
 GGTGCAGGAA GGAGGAGCGG AGGCTTGTTG CTTGGACACT GCCAGGCTGC TCTGTGTTCT 360
 GTTCTCTCTG GRAAGTGGAT CCGGTTCCGC CTCTTTGGCC CTCGAGACA 409

(2) INFORMATION FOR SEQ ID NO:85:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 611 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAACCGGATC CACTTCCGAA GAGAAGGTCA GAGCGCACTG CAGGCAGCGC GGCTCTGGGA 60
 AGAACTTCAC GGAGCCCCCT CTTAGAGCAG GGAGGGGGCT TTCTCAGTGA AATGTTTGGT 120


```

TTTTCTGCTGC CTCCTCTGCC CCAGGCCCCC CTCCAGGGTA CTGCCTATCC CAGATAGGTC      180
AGTGCAACCAG GGACCCGGCC GCCAGCACCG CCGACCCCTC CCAGAGTGAC GCCCTTGTTT      240
ACTGACAAAG AGACCTGTCC CAGGAGTGTC CTCCACCGAG CCGGTCAGCT GTGGGTGGTT      300
TTCCTGTTAC GACGCTCAGT AGCCTGTAGC AATAACAAAC TCGTGGCTAT GAATGCAGAT      360
GCAGTGTTCT CATAGAATAA CTGTTCTGTC ACTTTTACAG ACAAATCTAC GACAAAAAAA      420
AAGATCAACT TTTTTTTTCC GAACAACAAA AAAAATGAAT GATTACAATA GGAAAGGGAA      480
AAATTAAATA GCTACATATC ATTAACAAAT TAATGTTCTT CAAAAAATAC CTACAAATTT      540
CTCTGTACAT TCTTTACGCA CAGCGTAACG ATGGAAGTGG ATCCGGTTCG GCCTCTTTGG      600
CCCTCGAGAC A

```

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

```

GAACCGGATN CACTTCCCCT CCACGTAGTT GGNAGGGGAA CCAGCCAACC CGGCCATAGA      60
TCTCCCCTCG CCACCAGCCT TGGTGTCCCT TCTTGTTAAG GATCTTGATG ATGTCACCCT      120
CCTTGAGCGA CAGCTCTGAT CGGTCTCGGG CGCAGAAGTC ATAGCGGGCT TTGGGTGTGC      180
CAAAATACTT TGTGCTTCCC ACTGNTGGNC TGCTGATGGT TCTCTTTTCA NGCTCCTTGA      240
AGGGGAAGTG CAANGTGGTG TCCAGAGACT TGAAGCAATC CNTTAGAGAG TTCTGNTGGT      300
AAAACCTCCAC CAGNTCCGTA AGCCCCNGA AAGNCTTTT CTCTGTGATC CGGTACAGAA      360
CCTTCTTCTG TCA

```

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 489 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GTTGACCGCC CACGATGATC TTGCCGCCAC GCTTGCTGGT CTTCTCCACT GACAAGGCAG      60
TGCTCAGGCC CTGCTCATGC TTCCCAGAC CCTGGCCCTC CCGGAAGCCG NACTTCTGCA      120
TGATCTTGTG CGCCACCGTG CCCCCATGT TAGCGAGGAA GGAGTTGCTA GGTCCGGTTG      180
GAGATCTCGG TCTGTCTTGT TCCTCGTACA CTGGGGGAGG AATGGCTGCT TTGGAAGACT      240
GTGATCGAGG TCTTGAGTCC TCTTCATAAG GAAAATCTCG GGGTAACTCT TTGTCTTTCT      300
CTACCAGAGA AGTGGGTGGG GCAATGGCAG CTCCGCCCAT ACTTCTCTTC CTCCTCTCTC      360
GCTCATAATC TTCATCTTCA TCAGAATCTG GATCTGGTCT CTTGCAAAAC CCACTTGCTT      420
CATGTCTGTC TTTACGCCTT TTTTCCCTTT CTTCTATTTC CGTCGACGGC CTCTTTGGCC      480
CTCGAGACA

```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

GACGACTTTG	TGGGTATTAA	TTTTTGTTTA	AGTTTAAAT	AAAAGTAAAG	ATTCATTTTG	60
GATATCAGTT	GAAACCCCTT	AGTAACTCAG	TTTCTGTTAT	TCTTGTTCTC	ATTCCTTTA	120
AATACACTTG	TTCTTGCTT	TTGCCATTTT	GATTCTGTGA	AGTAGGCAGG	AGCAGGGATT	180
AATTTATACA	GTATTCCTGT	TCTGAACAAA	ACCAGAAAAG	TCACTGTATA	AACTTGACTT	240
AAAATAGTAT	CTTTCTCTTY	TCATGTATTT	TCATTTGGGG	GAAAAAAAT	CTCTTTAATT	300
GTAACCTGAA	TTCAAGCTGT	ACCCCTCCAT	GGTCCTACAC	TCTAGAGCTA	ATCTGGTTGG	360
GCAGAAAGGC	AGAAGGATGG	TATATTGTCC	CATTGTGCCT	ATAATGTATT	TTAAATTGGT	420
CATTCCACCT	TACCTAATGG	AAATTCTTGC	AGCTTTCCTA	GTGCTCATCA	GCGGTTTTAG	480
GAATTCACTA	ACGTCGACGG	CCTCTTGGC	CCTCGAGACA			520

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

GTTGACGGCG	TGGTGGCGGG	TGCCTGTAAT	TCCAGCTACT	CAGGAGGCTG	AGGAAGGAGA	60
ATCATTTGAA	CCTGGGAAGT	GGGGGTTGCA	GTGAGCCAAA	ATCGTGCCAT	TGCACTCCAG	120
CCTGGGCAAC	AAGAGTGAAA	CTCCATCTCA	GAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAG	180
GAAGGAACCG	GTGGGGCAAG	CAGAGTTAAG	ATGCTTTGCT	AAGTTAAAAA	GTCTACTAAC	240
TACCAAATCT	TGCTGTGGYT	TATCCAGAGC	TCTCAAAATG	CTGCCAATCT	ATTTTTAAGA	300
AGACCTAAAT	CCTCATTTTG	GCTTTTAGGA	CACTAGGATT	TGCCTTCAAC	CCATGTCTCC	360
AGTCATATAT	TTTCTTACTA	TTCTTCAAAC	ATACCTTTT	CTCTTTTCTT	CACTCTTCAT	420
TATGCTGTTT	AAATCGTCTGA	CGGCCTCTTT	GGCCCTCGAG	ACA		463

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GTACAAGAAG	TGGTCCATTC	CTTTGTCTGA	AGGAGCGACA	GGAGCATCTA	CGGTTGAGAA	60
GACAGAAAGT	TTGGCTTCGT	CGATGTCTTG	CTGTGTGAAT	TTTCCAGACT	TAGCCCAGTC	120
GACAGCCTTC	CCAAAAGACT	GGAGCGTCTC	TATTGTATTT	GGGTCCCTGT	AAGAGTAAAC	180
GGTGAAAATC	CCATTGTGGC	TGAGTTTTGC	GCCTCCACCA	TAAGCACCGC	CTTTTTCTCG	240
AATTTCTGTA	TGCAAGAATT	TGGCAGTCAT	CAAACGTGCA	AGGATTTTAA	GACTGGCATG	300
ATCTGGGTCC	GTGTAGGGGA	CAGTTCGGAT	GCATTCACCC	ACGTTATTCA	CCGGGAAGGG	360
CATCAGGAAG	TGAGTCTTCA	TCTGCCAGGG	CTTGAAGGTG	GGTTCCATGA	CCAGCTTCTT	420
AATGACCTGG	GAGCCATGGG	GAACGTGGGC	ATCTCCACCA	GAGCTGCTGG	GCACAGGTTT	480
CTCGACCGTG	TGTGGGCGCA	CAGGCCGTGC	ACGGCCTCTT	TGGCCCTCGA	GACA	534

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

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GTCGACCAGG ACTAGATTCT GTCTCTCCAA AGTGGCCCCA GCCCTGTTCT CTGTACTAGG      60
GAAGCCAGCT GTGTCTTTTC GAGGACAGTT GGTCCAGCCA GCAGGCTCAG TTCAGATACC      120
AGACAACCAT TCCAGCACGA GGGCTCAGCG CCCTGGCCCC GCGGTCGCT CCAGTGCCTG      180
TGTGCCCCACC AGCACATCCA TGAGGTAGTC CAATTCGGCC TCGTCCAGCT CCGGAGCTTC      240
CTCCTTGGCC GGCCCATCCT CAGGGCCTGG TTTGAGGCC TCAGAGGCTG GTGCCCCAAG      300
TTCATTGTCA TACATAGAGG TGTCAATATC CTCAAACAGG CCCTCAAGCC CATCGTCCAG      360
TAGACAGCCA GTGGCTGGGC CCAGCAGGTC CAAGGCACCC AGGCTGGGCG CTGCTCCCCC      420
GATGCTACGG CCTCTTTGGC CCTCGAGACA                                         450

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(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

```

GTCGACGGCG GYCATGGCAA AGCAGTACGA CTCGGTGGAG TGCCCCTTTT TTGTGATGAA      60
GTYTCCCAAA ATACGAAGAA GCTCGCCAAG ATCGGCCAAG GCACCTTCGG GGAGGTGTTT      120
AAGGCCAGGC ACCGCAAGAC CGGCCAGAAG GTGGCTCTGA AGAAGGTGCT GATGGAAAAC      180
GAGAAGGAGG GGTTCCCAT TACASCCTTG CGGGAGATCA GGATCCTTCA GCTTCTAAAA      240
CACGAGAATG TGGTCAACTT GATTGAGATT TGTCGGAACC AAAGCTTCCC CCTTATAACC      300
GCTGCAAGGG TAGTATWTTA CCTGGTGTTT GACTTCTGCG AGCATGACCT TGCTGGGCTG      360
TTGAGCAATG TTTTGGTCAA GTTCACGCTG TCTGAGATNC AAGAGGGTGA TGCAGATGCT      420
GCTTAACGGC CTCTTTGGCC CTCGAGACA                                         449

```

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```

GTCGACAAAA CATGGAGTTG TTCCTTTGGC CACATATATG CGAATCTATA AGAAAGGTGA      60
TATTGTAGAC ATCAAGGGAA TGGGTACTGT TCAAAAAGGA ATGCCCCACA AGTGTTACCA      120
TGGCAAACT GGAAGAGTCT ACAATGTTAC CCAGCATGCT GTTGGCATTG TTGTAAACAA      180
ACAAGTAAAG GGCAAGATTC TTGCCAAGAG AATTAATGTG CGTATTGAGC ACATTAAGCA      240
CTCTAAGAGC CGAGATAGCT TCCTGAAACG TGTGAAGGAA AATGATCAGA AAAAGAAAGA      300
AGCCAAAGAG AAAGGTACCT GGGTTCAACT AAAGCGCCAG CCTGCTCCAC CCAGAGAAGC      360
ACACTTTGTG AGAACCAATG GGAAGGAGCC TGAGCTGCTG GAACCTATTC CCTATGAATT      420

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CATGGCACAA TAGGTGTTAA AAAAAAAAAA TAAAGGACCT CTGGGGTCAA CGGCCTCTTT 480
GGCCCTCGAG ACA 493

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GTCGACGAGG GGGTCATGGY AGGCAGGGGC AGGTGCGTCA GAGATGGAGC GCAGGTCCTG 60
CATGGAGAAG CTCGCGAGCC TGCCGGCCAG CGCCCCCTGA CTCTGGGTGG CAGCCTGCAC 120
AGCAGCGGAG GCGGCAATGT TGAGGCCCCG CTCCCCGAAG CTGAGCACGG TCTCGTAGCT 180
GCGCTCCTTG GCCTGCACGA TGTACGCGTC GATCTCCTTC TCATGGCGGG ACAGGGACGG 240
GTGGACAAAC TTGCGGTAAA GCAGGCTGGC GCCCTTGGTG TAGGGTGAGA GCAGCCACAG 300
CACGAAGGCC ATCTTGATCT CATAGTAGAA AGGGAACCAG GAGATAAAAA TGTCTGTAAC 360
GATCTCTGCT GCCATGAAGA GTGCARCMMA CTATCCAGTA CATCATCCAG TGGACGGCCT 420
CTTTGGCCCT CGAGACA 437

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GTCNACCGCC CTTCTTGTCT CCTCCTCAGT NGTACACCTG TGTGGTCTCC ACCACCTCAG 60
ACTTNTCTCCG CCCCTTTCAG TNGGAAGAAG GNGCAGGCCC GTCTCGGGGT CCTCCACGCA 120
CCGNTCCAGA AGTTGCCTGT ACGTGAGGTT CTCATGCGTG TTGGGGTNAA AGAAGCCCTT 180
GGTGTGCTCG CTGGGGTCCG CCGGACGCG GKTCATCTCC TCACTGAAGT AGCCCCGTG 240
GTAGRSCACG TCCACAGACA CGCGGTGGTT GTGYACGGGG TCGATGATRC CGCCCGTGGC 300
GATCTGGGCC TCCAGNAGGN GGATNCCGTG CTGCNGGAGA ACCAGNCCCT TCTNNATGTC 360
CTGGAAGAGN GAGATGGTCC CCCCCGAGTA GGGGTCTCTG TANCCGGTGA CGNCCTTCTC 420
GACAGACAGC ATCTGCTCGT GAAGCTCGGG GCCCACCAG CCGCCTTCA CGGCCTCTTT 480
GGCCCTCGAG ACA 493

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GTTGACCCAC GTTAGTACGG TTGGATAGGA TATGCTCTCA TGGTAACGCG TCCAAGTTGG 60

AATGGTCTTC	CAGTCTCCAT	GGNATCCACA	TGCTACTGGC	GTTAGTTCCA	GATCTTGAGG	120
AAGNTATCCC	AGGACCCTGT	CGCCACAGGC	ATGNCATCGT	CANTCACGCC	CAGGCAGCTG	180
ACGCGGTTGT	CATGNCCAGN	CAAGACAAC	GCCCCGTCGG	GTTTGNGTGC	ATCCCAGACG	240
TTGCAGTTGA	AGTCGTCGTA	CCCAGCAAGG	AGGAGGSGSC	CGCTCTTGGW	GAAGGAGACA	300
GAGKTGATCC	CCCAGATGAT	GTTGTGTCATG	GAGTAAGTCA	TGAGCTCCYG	GTCAGCACGA	360
AGGTCAAACA	GCCTGCNGGT	GGCGTCGTCT	GAGCCAGTGC	CAAATGCATT	GCCATTTGGA	420
AAGAANCAAA	TGNCATTGAT	GTGAGACTCG	TGCCCCAGTGA	AGGTCTNCCG	GCACATGCCT	480
TCTCGCACAT	CCCAGAGTTT	GTCTGAAGCA	TCACAAGCAC	CAGAGACGAA	CAGTCTGGTG	540
TCAGTCGACG	GCCTCTTTGG	CCCTCGAGAC	A			571

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GTCGACGTAC	CACCAGCAAC	CATCAATCCC	GTCTCCTCCT	GCCTCCTCTC	CTGCAATCCA	60
CCCCGCCACG	ACTATCGCCA	TGGCAGCCCT	GATCGCAGAG	AACTCCGCT	TCCTGTCACT	120
TTTCTTCAAG	AGCAAGGATG	TGATGATTTT	CAACGGCCTG	GTGGCACTGG	GCACGGTGGG	180
CAGCCAGGAG	CTGTTCTCTG	TGGTGGCCTT	CCACTGCCCC	TGCTCGCCGG	CCCGGAAC	240
CCTGTACGGG	CTGGCGGCCA	TCGGCGTGCC	CGCCCTGGTG	CTCTTCATCA	TTGGCATCAT	300
CCTCAACAAC	CACACCTGGA	ACCTCGTGCC	CGAGTGCCAG	CACCGGAGGA	CCAAGAACTG	360
CTCCGCCGCC	CCCACCTTCC	TCCTTCTAAG	CTCCATCCTG	GGACGTGCGG	CTGTGGCCCC	420
TGTACCTGG	TCTGTCTCT	CCCTGCTGCG	TGGTGAGGCT	TATGTCTGTG	CTCTCAGTGA	480
GTTCTGTGAC	CCTTCCTCAC	TCACGGCCTC	TTTGGCCCTC	GAGACA		526

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GTTGACTTTG	TGGGTATTAA	TTTTTGTTTA	AGTTTAAAT	AAAAGTAAAG	ATTCATTTTG	60
GATATCAGTT	GAAACCCCTT	AGTAACTCAG	TTTCTGTTAT	TCTTGTCTC	ATTTCTTTA	120
AATACACTTG	TTCTTGCTT	TTGCCATTTT	GATTCTGTGA	AGTAGGCAGG	AGCAGGGATT	180
AATTTATACA	GTATTCCTGT	TCTGAACAAA	ACCAGAAAAG	TCACTGTATA	AACTTGACTT	240
AAAATAGTAT	CTTCTCTTT	TCATGTATT	TCATTTGGGG	GAAAAAAAT	CTCTTTAATT	300
GTAACCTGAA	TTCAAGCTGT	ACCCCTCCAT	GGTCCTACAC	TCTAGAGCTA	ATCTGGTTGG	360
GCAGAAAGGC	AGAAGGATGG	TATATTGTCC	CATTGTGCCT	ATAATGTATT	TAAATTGGT	420
CATTCCACCT	TACCTAATGG	AAATTCTTGC	AGCTTTTCTA	GTGCTCATCA	GCGGTTTTAG	480
GAATTCACTA	ACGTCGACGG	CCTCTTTGGC	CCTCGAGACA			520

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC	AAAGAGGCCG	TTGACGGGGC	TGGAGGAGGA	AGAAGAGGTG	GATCCCCGGA	60
TCCAGGGAGA	ACTGGAGAAG	TTAAATCAGT	CCACGGATGA	TATCAACAGA	CGGGAGACTG	120
AACCTTGAGGA	TGCTCGTCAG	AAGTTCCGCT	CTGTTCTGGT	TGAAGCAACG	GTGAAACTGG	180
ATGAACTGGT	GAAGAAAATT	GGCAAAGCTG	TGGAAGACTC	CAAGCCCTAC	TGGGATGCAC	240
GGAGGGTGGC	GAGGCAGGCT	CAGCTGGAAG	CTCAGAAAGC	CACGCAGGAC	CTCCAGAGGG	300
CCACAGAGGT	GCTCCGCGCC	GCCAAGGAGA	CCATCTCCCT	GGCCGAGCAG	CGGCTGCTGG	360
AGGATGACAA	GCGGCAGTTC	GACTCCGCCT	GGCAGGAGAT	GCTGAATCTC	GCCACTCAGA	420
GGGTCATGGA	GGCGGAGCAG	ACCAAGACCA	GGAGCGAGCT	GGTGCATAAG	GAGGTCGACG	480
GCCTCTTTGG	CCCTCGAGAC	A				501

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

GTCGACCGTG	TCCAGAGCCC	ACCTCCCTCA	CACCCACACA	GCGCTTCCTA	AAGGCAGGGA	60
CAGGAGCTGG	CCTCCCTCGC	CTGCTGGCAT	GGGGCTGGAC	ACAGGAGGAA	GTGGCGTGGG	120
GGCTGCCTGA	GGGGAGTGAG	GCGGCAGGAT	AGCTTCCCCA	GCAGGTCTCT	GGCTCAGGTC	180
CAGGTATCTC	CTCCTCCCCA	TACCTCTGCC	TCTCGCCTCC	GCTCAGAAAA	GCAGGTGCCC	240
TTAAGAGCCA	TCTCCACCCC	CATGTAAACT	GCACACAGGA	AGGGAGAGGC	CACTCCGACT	300
GCTCTGAGGT	CCAGGTAGGA	TGGTTTCCCC	CAGTGTCTGG	GTGGGGAGCA	AGGAACTCCA	360
GGGGCGACCT	TGTGCCACCG	CATCACCTTC	CTGCTCAGGG	AAGGGGCCCC	TGCTGCCGCT	420
TGGAGGGTGC	CATGCCCAGA	GCCTCTGCCC	CTAGCCTCAG	CCTCGCCTAC	TCACTGGGGG	480
CTCCAGCACC	CCCGGCCGTC	AACGGCCTCT	TTGGCCCTCG	AGACA		525

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

GTCGACGCGA	GTGGAGACCT	GTGGTAGAGA	AGCTCCTTTT	GATGTCCTAC	AGGCTTTCCA	60
CTGTGGTGTC	TCCAGTCATT	CAGAGCTCAT	CCCCTGAAGG	CCTCATCCCA	ATGGACACTG	120
ATTCAGAGTC	AGCAASC CGC	TTACAGATGA	TTCTGAATGA	GATTCANCCCT	CGAGATACTA	180
ATGATTATTT	TAACCAAGCC	AAAATATTGA	AAGAACATGA	TAGCTTTGAT	ATGAAGGACT	240
TGAATGCTAG	TGTGGTGAAT	ATTGATACTT	CTACAGAAAT	CAAAGGTAAG	GAAGTAAAAA	300
CATGTGATGT	AACTGCGCAG	ATGGTGCTGG	TATGTTGTTG	GAGAAGTATG	AAGGAAGTTG	360
CTTIACTTTT	AGGCATGTTG	TGCCAGCTTC	TGCCCATGTC	AACGGCCTCT	TTGGCCCTCG	420
AGACA						425

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

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GGGACGTAAT CAACCCAAGC TTATGACCCG CACTTACTGG GAANTCNTCG TTCATGGGGA      60
AGAANTGCAA TCCCCGATCC GCCATCACGA ATGGGGGGCA CCGGGTTANC CGCGCCTCCC      120
GGCGTAGGGT AGNCACACNC TGANNCAGTC AGTGTATCGC GCGTGCATCN CCGGACATCT      180
AAGGGCATCA CAGACCTGTT NTTGNTCAAT CTCGGGTGGN TGNNGCCAC TTGTCNCTCT      240
AAGAANATGG GGGACGCCGC CCNCTCGGGG GTNCGTAAC TAGNTAGNAT NCCAGAGTCT      300
CGTTCGTTAT CGGAAGTAAC CAGACANATC GCTCCCCCAN CTAAGANNGG CCATNCACCA      360
CCACCCACGG AATCGAGANA GAGCTATCAA TCTGTTGTTA GGACATGCCC GGCTTGCTTG      420
GTCATCATCT TGGTGACNC GACCTCTTTG NCCCTCGAGA CA                          462

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(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GTCGACAGAA ATCATTATTC TTTATTTGCA GNCATTCCAC CCCACCTATG TTTTCTTCTC      60
CTTCCTTCTT CTCTGTCAGG AGAGTTCTTG TCATGCTGAG CTTCTTCATT GTATGGCATT      120
TATATTTTAG CACTGTTTTA TTATTGCCTT CTGTATCAGC ATGTTCAACA TTTTCTTCAA      180
ATATAACACA GGTCCTTAGA GTGTCTTCAT ACTCCCAGC AAAGACACAG CTGTCCACTT      240
GCAGAAATGGG CCTCTCAGTG TCAATGCCCA AAACCTTGCA TTTATTTTCA CATTTTGAGA      300
GGAAGTCTGA ATCAATAATT CCTGATAATT CCACCAGAAC CAACTGCTCC TCCTCTTCCT      360
CGTCTTCTCC GTCCTCTGGA CTCGCTCGT CCGCCGCCGC CGCCATGGTC CCGCGCGGGT      420
TGACGGCCTC TTTGGCCCTC GAGACA                          446

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(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GANTTCCAGT GAAGTTGCCT TTTGCCNNC CCTAGNCATC CAACCTNTCN AAAACCAAGT      60
ANACNAGGCT GATTCTGGAA GTTCTTGAGG AAAAAGCAAG CTTTACAACC AAAATACCCA      120
GATGCTGTGN CCACATGGCT AAACCCTTGA CCCATCTCAG AAGCAGAATC TCCTANCCCC      180
ACAGAGTGCT GTGCCTCTG AAGAAACCAA TGACTTTAAA CAAGAGACCC TNCCAAGTAA      240
GTCCANCGAA AGCCATGACC ACATGGATGA TATGGATGAT GAAGATGATG ATGACCATGT      300

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GGACAGCCAG	GACTCCATTG	ACTCGANCGA	CTCTGATGAT	GTAGATGACA	CTGATGATTC	360
TCACCAGTCT	GATGAGTCTC	ACCATTCTGA	TGAATCTGAT	GAACCGGTCA	CTGATTTTCC	420
CACGGACCTG	CCANCAACGT	CGACGNCCTC	TTTGNCCCTC	GAGACA		466

(2) INFORMATION FOR SEQ ID NO:105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 568 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

GTCGACAGCG	ACCGCTCCTC	CCTTCCTTCC	TTGAATCAGA	GCACGGTAGA	AAGCTGCTGC	60
TCTATGCCGA	AGTGTTTCGA	AATTCCTGGC	AGCTGCATAG	ACCGCGGGGC	TGTCCCCTAA	120
CCTTTGCTCT	TGTCGCCTCC	TCCACCAGGA	GGGCCCCCCT	CCCTGTACCC	CAGCTTCCCA	180
CAGAGCTGCA	GGCACAGCTT	GGCTGCCTCC	CGCTTCCAGA	CCCCTATCTC	CATCAGGTGG	240
GCCTGAGGCG	GGGCTGACTC	TTTCTTTAGG	CCCCTCACAG	GGACTAGAGC	AGAATGGCAC	300
TCAGTAAGCA	GGGGTGACAA	CTAGAGGAAT	GGCAGGTGT	GTTTCAGCTGG	GAGAACAGTT	360
ACCAGAGACG	CTGTGATTCT	TCAGGTGTGA	GGGCAACTGT	TACAAGACTT	AAGTAGCAAC	420
AACAACCATG	GTAGACGCTG	CCTTCGATTG	TGCCCTTGGG	AGTCCCAGGC	CTGGCACCAG	480
GCCCTACTCA	TCCTTCATTT	CTTTTCTTTT	TCTTTTGTTT	TTTGTTTTTT	GGGTTTTTTG	540
GTCAACGGCC	TCTTTGGCCC	TCGAGACA				568

(2) INFORMATION FOR SEQ ID NO:106:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GATTCANTTT	GGATATCAAG	TTGNCCCCC	CNTAGTAACT	CAGTTTCTGT	TATTCTTGTT	60
CTCANCTTCC	CNATAAAAAC	ACTTGTTTCGT	GGCTNTTGCC	ANNTTGATTG	TGTGAAGTAG	120
GCAGGAGCAG	GGATTAATTN	ATANAGTATT	CCTGTTCTGA	NCGCAACCAG	AAAAGTCACT	180
GTATAAACTT	GACTTAAAAT	AGTATCTNTC	TCTTTTCATG	TATANTCAGG	TGGGGGGGNA	240
AAAATCTCTT	TAATTGTAAC	CTGAANTCAA	GCTGTACCCC	NCCATGGTCC	TACACTCTAG	300
AGCTAATCTG	GNTGGGCAGA	AAGGCAGAAG	GATGGTATAT	TGTCCCATTG	TGCCTATAAT	360
GTATNTTAAA	NTGGTCATTC	CACCTTACCT	AATGGAAATT	CTTGCAGCTT	TCCTAGTGCT	420
CATCAGCGGT	TTAGGAAGT	CACTAACGTC	GACGGCCTCT	TTGGCCCTCG	AGACA	475

(2) INFORMATION FOR SEQ ID NO:107:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 470 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

CCTGAGTTGT	GTCTAAGGNN	CNCAAGACAA	GTACCCAAGT	TTCCTCTAGN	TNTTCTCTTT	60
AAGCTTCTCN	AGTCATACAT	TTNCAAGCGT	CCTTTTGTC	ACCATNCCAG	TCNANATACA	120
TTATTTGTCC	TCCAATGGNT	GACTTGCCAG	CATCTACGTG	NCCAATGAAT	ACTACATTTA	180
CATGCTCTTT	CTTAGGAGCA	CCTGGCGGTG	CAACCACAGA	CTTAGGTNTT	GGGATTTTCT	240
CTTCCTCCTC	CATCATTTCA	TGGGCACTTT	TCTCTGGCGG	CCTTCCATCT	CCCAAGGAAC	300
CACCCCTGG	CTCTGCTTCA	CTTATTCTT	CTTTGTGCTC	CCATGATTCT	TCTGGAGACA	360
TTTCTGTCTC	TCCACTTTCT	ACAATAGGTT	CTGAAAGTTC	CATGCTAACA	GCTGAATTTG	420
AACCTTCACA	CAATGACTGT	TCGTGACGG	CCTCTTTGGC	CCTCGAGACA		470

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCGGCC	AAAGAGGCCT	ACTCACAGTC	ATCAATTATA	GACCCACAA	CATGCGCCCT	60
GAAGACAGAA	TGTTCCATAT	CAGAGCTGTG	ATCTTGAGAG	CCCTCTCCTT	GGCTTTCCTG	120
CTGAGTCTCC	GAGGAGCTGG	GGCCATCAAG	GCGGACCATG	TGTCAACTTA	TGCCGCGTTT	180
GTACAGACCC	ATAGACCAAC	AGGGGAGTTT	ATGTTTGAAT	TTGATGAAGA	TGAGCAGTTC	240
TATGTGGATC	TGGATAAAAA	GGAGACCGTC	TGGCATCTGG	AGGAGTTTGG	CCGAGCCTTT	300
TCCTTTGAGG	CTCAGGGCGG	GCTGGCTAAC	ATTGCTATAT	TGAACAACAA	CTTGAATACC	360
TTGATCCAGC	GTTCCAACCA	CACTCAGGCC	GTCGAG			396

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

GAATTCGGCC	AAAGAGGCCT	ACCCGATTGC	TAAATGGATT	ATGAAAGCAA	ATTGCTACTG	60
GGAGGTGATG	GTCAAAAGCA	AACTTAGATG	GTTTTACAC	CATCTGTCAT	CATGACTCAA	120
AGGGAAATGC	TAGCCACACC	ATTTTCCAGT	GAAGCCACTG	CTTTACACAG	TAGATACACA	180
TAGCTTCCTA	TTGTTATTTT	CTTTTCTAAT	TATGTACATT	TAGAAAAAAA	ATACAACACT	240
GTGTTAAACA	GCAGGACAGC	TAGCAATGGA	ACATACAACA	CTATGCTGAA	AAACCACAAC	300
AGCTTGGTTA	AGCGGAGGAG	AGAAACAGAG	ATGGCCTTCA	TGGAGTGAAG	CTGTCAATGC	360
CTGCCATCTC	CTTAGTCTGT	GACGGATCTG	CACTCTGAGG	GCAGGCCTTC	TGAGCGCCGC	420
CACTTTGCCA	GGCGCTGCTT	AAACCATTTC	TGGGTCTCCT	CCTCGGAAAG	GCCTGCCTCG	480
GCCGCGATGA	GGCACAGCGT	GGTGAATCC	GGGTGCTTGT	CGAG		524

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

GAATTCGGCC	AAAGAGGCCT	ATTTTTTTTT	TCTTTTTTTT	GGCATATGTA	GTAATATTAG	60
AAACATTTAA	TTTGGGAAAC	TTTGATTCTT	GAAAGAGAAA	ACAAAAGCAT	GTGAATAAAC	120
TTTGAAGTGT	TCACCTCAGT	TTGGGACCAA	ACTGCTTGGA	TCTTTGTAAA	AACCGGTTTT	180
GTATGTCAAG	GAGGAGTTTA	AGGCCTTTCC	GACCACCTTG	TGTTCCCTTT	TTCTGCGCAG	240
CCATGTATCA	CGTGGAGTTG	CTCCTTACCA	CACCTCACGT	GCCCCTGAGC	CCTATTTTCT	300
GATTTCTTCT	GGGCTGGACT	TCCCCGTTCT	CCACCAGCAG	CTCCAGTATC	CCTGTTGAAT	360
TCTAGACCTG	CGTCGAG					377

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

GAATTCGGCC	AAAGAGGCCT	AGCGGACAAG	TTTGAGAGAC	CTGGCCTTGG	CCAAAGCCCT	60
CGATTCGCTG	TGTCAGAAAA	ACTGAGGTGA	GAAGAGACCA	CCACCCTCTC	CACCACCCTC	120
TCAGTAGGAA	AGCGGGATCA	ACAGAGATCA	GAAGGACAGC	ACACTCACAC	CTGCACATGA	180
ACACACCATC	TATGTCAGGA	AATCCAGGGG	AAGGGGAAGA	GGGGTGGAGT	GGCTCCGCAG	240
GGCTGACCTG	ACAGGGGACA	GGAACACTCC	CCTAGACCCA	GGGAAGTCGC	CCCAAATCCA	300
AAGCTCTTGA	AAGGAGGTAT	GGCCTCGAAA	CTCCAGAAGC	CTCTTCTGCC	AACGCACCGA	360
GGACCTGCAC	CTCCCATTC	GCACGCGTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

CAATTCGGCC	AAAGAGGCCT	ACAGCATTTT	TACTCCTTCC	AAGAAGAGCA	GCAAAGCTGA	60
AGTAGCAGCA	GCAGCACCAG	CAGCAACAGC	AAAAAACAAA	CATGAGTGTG	AAGGGCATGG	120
CTATAGCCTT	GGCTGTGATA	TTGTGTGCTA	CAGTTGTTCA	AGGCTTCCCC	ATGTTCAAAA	180
GAGGACGCTG	TCTTTGCATA	GGCCCTGGGG	TAAAAGCAGT	GAAAGTGGCA	GATATTGAGA	240
AAGCCTCCAT	AATGTACCCA	AGTAACAAC	GTGACAAAAT	AGAAGTGATT	ATTACCCTGA	300
AAGAAAATAA	AGGACAACGA	TGCCTAAATC	CCAAAGTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

GAATTCGGCC AAAGAGGCCT AGCAGTAGCA TGTGCAGCAA CCAATCAAGA TGGAGAACTA	60
TACCTGCACT CATTTGTGTG TTTGCATGTA TAGTCTCTG CAGTAGCATG TGCAGCAACC	120
AATCAAGATG GAGAACTGTT CCATCGCAA GCTCCCTCTT GCCACTTCTT TTTAGCCACC	180
CAATCCTCTC TGCTCCCGTC GAG	203

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

GAATTCGGCC AAAGAGGCCT ATGAAGATCA GCTATTAGAA GAGAAAGATC AGTTAAGTCC	60
TTTGGACCTG ATCAGCTTGA TACAAGAACT ACTGATTTCA ACTTCTTTGG CTTAATTCTC	120
TCGGAAACGA TGAAATATAC AAGTTATATC TTGGCTTTTC AGCTCTGCAT CGTTTTGGGT	180
TCTCTTGGCT GTTACTGCCA GGACCCATAT GTAAAAGAAG CAGAAAACCT TAAGAAATAT	240
TTTAATGCAG GTCATTGAGA TGTAGCGGAT AATGGAAGTC TTTTCTTAGG CATTTTGAAG	300
AATTGAAAAG AGGAGAGTGA CAGAAAAATA ATGCAGAGCC AAATTGTCTC CTTTACTTTC	360
AACTTTTTA AAAACTTTAA AGATGACCAG AGCATCCAAA AGAGTGTTGA GACCATCAAG	420
GAAGACATGA ATGTCAAGTT TTTCAATAGC AACAAAAAGA AACGAGATGA CTTGAAAAG	480
CTGACTAATT ATTCCGTAAC TGACTTGAAT GTCCAACGCA AAGCAATACA TGAACATC	540
CAAGTGATGG CTGAACTGTC GCCAGCAGCT AAAACAGGGG TCGAG	585

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC AAAGAGGCCT ACTGGCGGCC GCGGAGACGC AGAGTCTTGA GCAGCGCGGC	60
AGGCACCATG TTCCTGACTG CGCTCCTCTG GCGCGGCCGC ATCCCGGCC GTCAGTGGAT	120
CGGGAAGCAC CGGCGGCCGC GGTTCGTGTC GTTGCCCGCC AAGCAGAACA TGATCCGCCN	180
CCTGGAGATC GAGGCGGAGA ACCATTACTG GCTGAGCATG CCCTACATGA CCCGGGAGCA	240
GGAGCGCGGC CACGCCGCGG TGCGCAGGAG GGAGGCCTTC GAGGCCATAA AGGCGGCCGC	300
CACTTCCAAG TTCCCCCGC ATAGATTCAT TGCGGACCAG CTCGACCATC TCAATGTCGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

GAATTCGGCC	AAAGAGGCCT	AAACAAAATG	GTTATCAACC	ACTTGGAGAA	GTTGTTTGTG	60
ACAAACGATG	CAGCAACTAT	TTTAAGAGAA	CTAGAAGTAC	AGCATCCTGC	TGCAAAAATG	120
ATTGTAATGG	CTTCTCATAT	GCAAGAGCAA	GAAGTTGGAG	ATGGCACAAA	CTTTGTTCTG	180
GTATTTGCTG	GAGCTCTCCT	GGAATTAGCT	GAAGAACTTC	TGAGGATTGG	CCTGTCAGTT	240
TCAGAGGTCA	TAGAAGGTTA	TGAAATAGCC	TGCAGAAAAG	CTCATGAGAT	TCTTCCTAAT	300
TTGGTATGTT	GTTCTGCAAA	AAACCTTCGA	GATATTGATG	AAGTCTCATC	TCTACTTCGT	360
ACCTCCATAA	TGAGTAAACA	ATATGGTAAT	GAAGTATTTT	TGGCCAAGCT	TATTGCTCAG	420
GCATGTCGAG						430

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

GAATTCGGCC	AAAGAGGCCT	AGAAGAAGAT	GATCCTAAAC	AAAGCTCTGA	TGCTGGGGGC	60
CCTCGCCCTG	ACCACCGTGA	TGAGCCCTTG	TGGAGGTGAA	GACATTGTGG	CTGACCACGT	120
TGCCTCTTAC	GGTGTAACCT	TGTACCACTC	TTACGGTCCC	TCTGGCCAGT	TCACCCATGA	180
ATTTGATGGA	GACGAGGAGT	TCTATGTGGA	CCTGGAGAGG	AAGGAGACTG	TCTGGAAGTT	240
GCCTCTGTTT	CACAGACTTA	GATTTGACCC	GCAATTTGCA	CTGACAAACA	TCGCTGTGCT	300
AAAACATAAC	TTGAACATCC	TGATTAAACG	CTCCAACCTT	ACCGCTGCTA	CCAATGAGGT	360
TCCTGAGGTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

GAATTCGGCC	AAAGAGGCCT	ACTTAACCAG	AATGACAGTC	TTTCCCCTAT	CTTCCTTCTT	60
TATTCTTATC	TTCTATCTTT	CCCTCCCAAA	CTCTTTCCCC	GACATAACAG	AAAACATGAA	120
GGAATTAAAG	GAGGCCAGGC	CGCGCAAAGA	TAACAGGCGT	CCAGATCTGG	AAATCTATAA	180
GCCTGGCCTT	TCTCGGCTAA	GGAACAAGCC	CAAAATCAAG	GAACCCCTTG	GGAGTGAGGA	240
ATTCAAAGAT	GAAATTGTTA	ATGACCGAGA	TTGCTCTGCT	GTTGAAAATG	GTACACAGCC	300
CGTCGAG						307

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

GGAGCTGCAC ATGGTACTTT TGGAGAGCCT GGTGGAAATC ATTTTGGTTG CTGTTTCAGCA	60
TGTGGATTAT AGTCTTCGAT GTGAGCAGGA TCCAGAGAAG AAAGCTTTTA TCAGACAGAA	120
TGCATCCTTT TTATATGAAA CAGTCCTCCC TGTGGTGGAG AAAAGGTTTG AAGAAGGTGT	180
GGGGAAACCT GCCAAGCAAC TCCAAGATCT GAGGAATGCA TCTAGACTTA TTCGTGTGAA	240
TCCTGAAGTC GAG	253

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC AAAGAGGCCT ACACATATTG GAAAAATGAT CTTTTTGGAG CACTGTTCTG	60
CTGCTTAGAC CCAGTACTCA CTATTGCTGC TAGTCTCAGT TTCAAAGATC CCATTTGTCA	120
TTCCACTGGG AAAAGAAAAG ATTGCAGATG CAAGAAGAAA GGAATTGGCA AAGGATACTA	180
GAAGTGATCA CTTAACAGTT GTGAATGCGT TTGAGGGCTG GGAAGAGGCT AGGCGACGTG	240
GTTTCAGATA CGAAAAGGAC TATTGCTGGG AATATTTTCT GTCTTCAAAC AACTGTCAGA	300
TGCTGCATAA CATGAAAGGA CAGTTTGCTG AGCATCTTCT TGGAGCTGGA TTTGTAAGCA	360
GTAGAAATCC TAAAGATCCA GAATCTAATA TAAATTCAGA TAATGAGAAG ATAATTAAAG	420
CTGTCGAG	428

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC AAAGAGGCCT ACAAGACGTC ATTTCACAAA GTGCGCCATT CTGAGGATAT	60
GCAGTTTGCC TTCTCTTATT TTTATTATCT CATGAGTGCA GTGCAGCCAC TGAATATATC	120
TCAAGTCTTT GATGAAGTTG ATACAGATCA ATCTGGTGTC TTGTCTGACA GAGAAATCCG	180
AACACTGGCT ACCAGAATTC ACGAACTGCC GTTAAGTTTG CAGGATTTGA CAGGTCTGGA	240
ACACATGCTA ATAAATTGCT CAAAAATGCT TCCTGCTGAT ATCACGCAGC TAAATAATAT	300
TCCACCAACT CAGGAATCCT ACTATGATCC CAACCTGCCA CCGGTCACTA AAAGTCTAGT	360
AACAACTGT AAACCACTAA CTGACAAAAT CCACAAAGCA TATAAGGACA AAAACAAATA	420
TAGGTTTGAA ATCATGGGAG AAGAAGAAAT CGCTTTTAAA ATGATTGCTA CCAACGTTTC	480
TCATGTGGTT GGCCAGTTGG ATGACATAAG AAAAAACCCT GTCGAG	526

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GGGTGGCAAT ATGGACTTCC TCTTTTCTGC CANCCCANAC CCATACATCG GGATTCCTAT	60
AATACCTTCG TTGGTCTCCC TAACATGTAG GTGGNGGNGG GGAGATATAC AATAGAACAG	120
ATACCAGACA AGACATAATG GGCTAAACAA GACTACACCA ATTACACTGC CTCATTGATG	180
GTGGNACATA ACGAGCTAAT ACTGTAGCCC TAGACTTGAT AGCCATCATC ATATCGAAGT	240
TTCCTACCC TTTTTCATT TGCCATCTAT TGAAGTAATA ATAGGCGCAT GCAACTTCTT	300
TTCTTTTTTT TTCTTTTCTC TCTCCCCCGT TGTGTGCGAG	340

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCGGCC AAAGAGGCCT ACGTCCTTTT AAATCTTAAT GAAATATCAT GGAATATTGT	60
ATGGTCTTCA TATCGTTCTA TATAATGCAA ATGGTGAACG GCTCTGTTCT TTGCTTTCCT	120
GAAAGCATCC ATCCGATCAG TAGCTTTCCC AATAGAAAAA CCTGCAGCTC CTTTCCGTT	180
CCCCACAGCC ACCAAGACAC GGATCGATT TTTTCTTCCC TCTTTCGCGAG TCATAGTGAA	240
AACGTTTCTT ACCTCAAGTA TCTGGTATC AAAATCCTCA TATGTTTCTC CACAGTCGAG	300

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCGGCC AAAGAGGCCT ACCAGCTTTG AGGTGACCT GTTTCTCTTT GTCTGCCTTC	60
CCAAAACACC AGCCCCCAGG AAGACATTAA GCAGCCTTAA GCTTAAATTC CTACTCCCTC	120
TTCCAAATTT GGCTCACTTG CCTTAGATCC AAGGCAGGGA AAGGAAAAGA AGGGGGGTCT	180
CTGGCTTTAT TACTCCCCTA AGTCTTTACT CTGACTTCCC CAAACCCAGA AAGATTTTCT	240
CCACAGTGTT CATTTGAAAG AGGAGTATTT TGTCCCATTT TCCCCTTCCT CATTATCAAA	300
CAGCCCCAGT CTTCTTGTC TCTGCTAAGA AAGTAGAGGC ATGATGATCT GCCTCTCAAC	360
TGCCCTAGTC GAG	373

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC	AAAGAGGCCT	ACGCAGATAC	GGGCTTACAG	ATACTTTTGA	CACTCTTACA	60
AAATGTTGCA	CAAGAAGAAG	CTGCAGCTCA	GAGTTTTTAT	CAAACCTATT	TTTGTGATAT	120
TCTCCAGCAT	ATCTTTTCTG	TTGTGACAGA	CACTTCACAT	ACTGCTGGTT	TAACAATGCA	180
TGCATCAATT	CTTGCAATATA	TGTTTAATTT	GGTTGAAGAA	GGAAAAATAA	GTACATCATT	240
AAATCCTGGA	AATCCAGTTA	ACAACCAAAT	CTTCTTTCAG	AAATATGTGG	CTAATCTCCT	300
TAAGTCGGCC	TTCCCTCACC	TACAAGATGC	TCAAGTAAAG	CTCTTTGTGA	CAGGGCTTTT	360
CAGCTTAAAT	CAAGATATTC	CTGCTTTCAA	GGAACATTTA	AGAGATTTC	TAGTTCAAAT	420
AAAGGAATTT	GCAGGTGAAG	ACACTTCTGA	TTTGTTTTTG	GAAGAGAGAG	AAATAGCCCT	480
ACGGCAGGCT	GATGAAGAGA	AACATAAACG	TCAAATGTCT	GTCCCTGGCA	TCTTTAATCC	540
ACATGAGATT	CCAGAAGAAA	TGTGTGATTA	AAATCCAAAT	TCATGCTGTT	TTTTTTCTCT	600
GCAACTCGTT	AGCAGAGGAA	AACAGCATGT	GGGTATTTGT	CGAG		644

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC	AAAGAGGCCT	ACGTTATACT	ATTAGATCCT	TTCATTATCA	ATCCCTTTTA	60
AAGGCAAGGA	AACAGGTTCA	GCAAGATCAG	CTGACTTCTC	TGTGTAAGTG	GGACCTGAGA	120
TTTGAAAGTT	GAGAGCAGCA	TGTTTGGCCC	ACTGAAACTC	ATCCTGCTGC	CAGTGTTACT	180
GGATTATTCC	TTGGGCCTGA	ATGACTTGAA	TGTTTCCCCG	CCTGAGCTAA	CAGTCCATGT	240
GGGTGATTCA	GCTCTGATGG	GATGTGTTT	CCAGAGCACA	GAAGACAAAT	GTATATTCAA	300
GATAGACTGG	ACTCTGTAC	CAGGAGAGCA	CGCCAAGGAC	GAATATGTGC	TATACTATTA	360
CTCCAATCTC	AGTGTGCCTA	TTGGGCGCTT	CCAGAACCGC	GTACACTTGA	TGGGGGACAA	420
CTTATGCAAT	GATGGCTCTC	TCCTGCTCCA	AGATGTGCAA	GATGTCGAG		469

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGACT	CGCCGCCATC	TCAGGTCTCT	TGGCTTTGCC	60
AGGGCCCACC	GGAGAAAAC	TGACGACCGT	TTCTGTAATC	CTTATGGGAG	ACCAACCTTG	120
TGCCTCCGGG	AGATCCACTC	TCCACCTGG	AAACGCACGG	GAAGCCAAGC	CTCCAAAAAA	180
GCGCTGCCTC	CTCGCTCCGC	GTTGGGATTA	TCCGGAAGGA	ACTCCCAACG	GAGGTAGTAC	240
CACTCTACCC	TCCGCACCTC	CTCCTGCATC	AGCCGGCCTG	AAGTCGCACC	CTCCTCCTCC	300
GGAGAAGTAG	AGAAATAAAT	TTCTCCCACC	CTAAACCAGT	CTTTGAGTGA	TTGCAGTATG	360
ACTCCATTTT	CCTGGTGCAT	TCATATAATA	GTTCACTTGG	TGAAAACAAT	GAAGATTATT	420
TACAATGCTA	CCCCG					435

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```
GAATTCGGCC AAAGAGGCCT AACCAAGCAG AAGCTGTACC ACAAGAAGAT CTTCCGGACT      60
GCCATGCTGT TCCAGTTTGT GAACGTGCTG CTCCAGGTCC TGGTCCACAA GTCCCATGAT      120
CTTCTGCAGG AGGAGATTGG CATCGCCATC TACAACATGG CCTCAGTCGA G              171
```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```
GAATTCGGCC AAAGAGGCCT AGTCATGACT CCCCTGATTT GGCTCCTAAT GTCACCTATT      60
CCCTGCCCAG AACCAAAAGT GGTAAAGCCC CAGAAAGAGC CTCTAGCAAG ACTTCTCCAC      120
ATTGGAAGGA GTCAGGAGCC TCCCATTTGT CATTCCCAA GAACAGCAAA TATGAGTATG      180
ACCCTGACAT CTCTCCTCCA CGAAAAAAGC AAGCAAAATC CCATTTTGGA GACAAGAAGC      240
AGCTTGATTC CAAAGGTGAC TGCCAGAAAG CAACTGATTC AGACCTTTCT TCTCCACGGC      300
ATAAACAAAG TCCAGGGCAC CAGGATTCTG ATTCAGATCT GTCACCTCCA CGGAATAGAC      360
CTAGACACCG GG                                372
```

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```
GAATTCGGCC NAAGAGGCCT AGGGTGGGAC AAGAGAGTGA GACTAGAATA TAAATATCCG      60
TAAACAGCAT CTGAGCATTG GTCTTTAACA GGGAGGAGGA ACCACTGGTG TATATTAATT      120
TAGGACACAG GATCATTATA GGGGTNGGGC CAGCTGGTGT TAATGGCATG CAGGCATATG      180
TGATGCCAAC CATGAGGGCT GGAAGAACCA GAAGCCAAAG AAGAATATGA CCGCATCTAT      240
TCTAAAGCTA CTGTGGTGGT TTCTCATGCT TCAGAGTCTC GTAAGTCTCC TGGTTCCTGG      300
TGCTCAGGCC CGTGTAACA CCATCTGATT TCTCATAGCT GGTTATAGCT GCCTTTCGCA      360
CTTGATCTT CAGTCGAG                                378
```

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCGGCC	AAAGAGGCCT	AGGTGCCGCG	GTCCTGTCTT	GCTGTGCCTG	CGGCAGGGGC	60
TCGGAACCAA	TTCATTCCTG	CACGGCCTGG	GGCAGGAGCC	CTTCGAGGGA	GCTCGGTCAC	120
TGTGTTGCAG	GTCCTCGCCT	AGAGACCTGC	GAGATGGAGA	AAGAGAGCAC	GAGGCGGCAC	180
AAAGGAAAGC	CCCAGGAGCA	GAGTCTTGCC	CATCTCTCCC	TCTGAGCATC	TCGGACATTG	240
GGACTGGATG	TCTTTCGTCA	CTGGAAAACC	TCAGACTGCC	GACGCTGCGG	GAAGAGTCAT	300
CCCCTCGAGA	GCTCGAGGAC	TCGAGCGGAG	ACCAGGGCCG	GTGCGGTCCC	ACACACCAGG	360
GATCCGAGGA	TCCTTCGATG	CTCTCGCAGG	CCCAGTCCGC	TACCGAGGGT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

AAGCGTGCTC	GTGCCCCTAT	TNCCNAGGGG	NTCAGTCTGT	NNCGCCCAN	GNCCAAGNCC	60
AAGCCCAAGN	CCNAGNCCAA	GGATCCANNC	CAAGGCCCAG	GCTGCAGCCC	CAGCTTCAGT	120
TCCAGCTCAG	GCTCCACAC	GTACCCAGGC	CCCCACAAAG	GCTTCAGAGN	AGATATCTCT	180
CCCAACATGA	GGACAGAAGG	ACTGGTGCGA	CCCCCACC	CCGCCCTGG	GCTACCATCT	240
GCATGGGGCT	GGTCTCTCCT	GTGCTATTG	TACAAATAAA	CCTGAGGCAG	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

ATGGACTTCC	TCTTTTCTGC	CANCCACAC	CCATACATCG	GGAGCCTATA	ATACCCTTCG	60
TTGNTCTCCC	TAACATGTAG	GTGGCGGAGG	GGAGATATAC	AATAGAACAG	ATACCAGACA	120
AGACATAATG	GGCNNAACAA	GACNACACCA	ATTACNCTNC	CTCATTGATG	GTGGNACATA	180
ACGAGCTAAT	ACTGTANCCC	TAGACNTGAT	AGCCATCATC	ATATCGAAGT	TTCACCTACC	240
TTTTTCCATT	TGCCATCTAT	TGAAGTAATA	ATAGGCGCAT	GCAACTTCTT	TTCTTTTTTT	300
TTCTTTTCTC	TCTCCCCCGN	TGTTGTCTCA	CCATATCCGC	AATGACGTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC AAAGAGGCCT ACGTTATCCG CGATGCGTTT CCTGGCAGCT ACATTCCTGC	60
TCCTGGCGCT CAGCACCCTG GCCCAGGCCG AACCGGTGCA GTTCAAGGAC TGCGGTTCTG	120
TGGATGGAGT TATAAAGGAA GTGAATGTGA GCCCATGCCC CACCCAACCC TGCCAGCTGA	180
GCAAAGGACA GTCTTACAGC GTCAATGTCA CCTTCACCAG CAATATTGAG TCTAAAAGCA	240
GCAAGGCCGT GGTGCATGGC ATCCTGATGG GCGTCCAGT TCCCTTTCCC ATTCCTGAGC	300
CTGATGGTTG TAAGAGTGA ATTAAGTCC CTATCCAAA AGACGTCGAG	350

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCGT CGACCTCCCT TCCAGCCCCC	60
AGAAAGCTCG GTCATTGAG TGTTTCTAG AATCCTGGG TGCTCCCGG CCGTCTCAG	120
AGAAGTGGCA GGTTCACGT TCAGCCGTGT GCGGATCGT GTGGCTTCCA AAGCCTTTTA	180
CAGCCCCCGC CCCCATCCC GTGGTCTGTC TGCAGGAAGT CTCCGCTCTG TGAGAAGCCT	240
CTTCCGAGT CGAG	254

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC AAAGAGGCCT ACTAGAGGGG TCAGTGGCCC CGCACGGTGG GGTGGCCGCT	60
CAGGGCCTAG GGAGCAGGTG GGAGGGCTT GGAGGGCAGA ACAGAGGGCC TGGGGGCTGC	120
TCTGCTGGCC ACCACTGCTT TCTGGTTGAA CCAGATAAGT AGCTGGTGGT GACGGCTGTG	180
GGCCCTGAGT CGGGGAGAA GAGGCAGAGG GAGCAGTGGG CTGGGCTAGT GGGGACATGA	240
GTGGGTGGTG ATCATGCCTG TGTCGGGGGA GCTGAGGCAG AGAGTGGGGC AGCGAGCATC	300
CCCTGAGGGC AGGAGGAGAG GGGTGGGGAC AGGGAAGGGT CGGGGGTGGT CCCAGCCCTG	360
AAGACAGGAG TGGCGAGGGC AGGTGTGGTC TAGGTGCTTG TCGAGGTGGA CAACATGGGT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC	AAAGAGGCCT	AATGGCGTCC	AGGTCTAAGC	GGCGTGCCGT	GGAAAGTGGG	60
GTTCCGCAGC	CGCCGGATCC	CCCAGTCCAG	CGCGACGAGG	AAGAGGAAAA	AGAAGTCGAA	120
AATGAGGATG	AAGACGATGA	TGACAGTGAC	AAGGAAAAGG	ATGAAGAGGA	CGAGGTCATT	180
GACGAGGAAG	TGAATATTGA	ATTTGAAGCT	TATTCCTAT	CAGATAATGA	TTATGACGGA	240
ATTAAGAAAT	TACTGCAGCA	GCTTTTCTA	AAGGCTCCTG	TGAACACTGC	AGAACTAACA	300
GATCTCTTAA	TTCAACAGAA	CCATATTGGG	AGTGTGATTA	AGCAAACGGA	TGTTTCAGAA	360
GACAGCAATG	ATGATATGGA	TGAAGATGAG	GTTTTTGGTT	TCATAAGCCT	TTTAAATTTA	420
ACTGAAAGAA	AGGGTACCCA	GTGTGTTGAA	CAAATTCAAG	AGTTGGTTCT	ACGCTTCTGT	480
GAGAAGAACT	GTGAAAAGAG	CATGGTTGAA	CAGCTGGACA	AGTTTTTAAA	TGACACCACC	540
AAGCCTGTGG	GCCTTCTCCT	AAGTGAAAGA	TTCATTAATG	TCCCTCCACA	GATCGCTCTG	600
CCCATGTACC	AGCAGCTTCA	GAAAGAACTG	TCGGGGGCAC	ACAGAACCAA	TAAGCCATGT	660
GGGAAGTGCT	ACTTTTACCT	TCTGATTAGT	AAGACATTTG	TCGAG		705

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC	AAAGAGGCCT	ACCCAGCTCA	GAATCTTGCT	GCTCGGCCCC	CAGGAGAGCA	60
ACAACACAAC	GGGAACGATG	TGGAAGGTGT	CAGCTCTGCT	CTTCGTTTTG	GGAAGCGCGT	120
CGCTCTGGGT	CCTGGCAGAA	GGAGCCAGCA	CAGGCCAGCC	AGAAGATGAC	ACTGAGACTA	180
CAGGTTTGA	AGGCGGCGTT	GCCATGCCAG	GTGCCGAAGA	TGATGTGGTG	ACTCCAGGAA	240
CCAGCGAAGA	CCGCTATAAG	TCTGGCTTGA	CAACTCTGGT	GGCAACAAGT	GTCAACAGTG	300
TAACAGGCAT	TCGCATCGAG	GATCTGCCAA	CTTCAGAAAG	CCCAGTCGAG		350

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC	AAAGAGGCCT	AGTGGACAGG	AAGTAGAATT	TATTGGTGAG	TATTAAGAGG	60
GGGGCAGCAC	ATTGGAAGCC	CTCATGAGTG	CAGGGCCCCG	CACTTGTCCA	GAGGGCCACG	120
ACTGGGGATG	TACTTGACCC	CACAGCCATC	TGGGATGAGC	CGCTTTTCAG	CCACCATGTC	180
TTCAAATTCA	TCAGCATTGA	ACTTGGTGAA	GCCCCACTTC	TTTGAGATGT	GGATCTTCTG	240
GCGGCCAGGA	AACTTGAAC	TGGCCCTGCG	CAGGGCCTCA	ATCACATGCT	CCTTGTCTG	300
CAGCTTGGTG	CGGATGGACA	TGATAACTTG	GCCAATGTGA	ACCCTGGCCA	CAGTGCCTG	360
GGGCTTTCCA	AAGGCACCTC	GCATGCCTGT	TTGGAGCCTG	TCAGCCCCAG	CACAGGACAA	420
CATCTTGTTG	ATGCGGATGA	CGTGGTCGAG				450

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

GAATTCGGCC	AAAGAGGCCT	ATGAAGATCA	GCTATTAGAA	GAGAAAGATC	AGTTAAGTCC	60
TTTGGACCTG	ATCAGCTTGA	TACAAGAACT	ACTGATTTCA	ACTTCTTTGG	CTTAATTCTC	120
TCGGAAACGA	TGAAATATAC	AAGTTATATC	TTGGCTTTTC	AGCTCTGCAT	CGTTTTGGGT	180
TCTCTTGGCT	GTTACTGCCA	GGACCCATAT	GTAAAAGAAG	CAGAAAACCT	TAAGAAATAT	240
TTTAATGCAG	GTCATTGAGA	TGTAGCGGAT	AATGGAATC	TTTTCTTAGG	CATTTTGAAG	300
AATTGGAAAG	AGGAGAGTGA	CAGAAAAATA	ATGCAGAGCC	AAATTGCTCT	CTTTTACTTC	360
AAACTTTTTA	AAAACTTTAA	AGATGACCAG	AGCATCCAAA	AGAGTGTGGA	GACCATCAAG	420
GAAGACATGA	ATGTCAAGTT	TTTCAATAGC	AACAAAAAGA	AACGAGATGA	CTTCGAAAAG	480
CTGACTAATT	ATTTCGGTAA	TGACTTGAAT	GTCCAACGCA	AAGCAATACA	TGAACTCATC	540
CAAGTGNTGG	CTGAAGTGTG	GCCAGCAGCT	AAAACAGGGG	TCGAG		585

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 471 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC	AAAGAGGCCT	ATTGGAGTTT	GAGTATAGTA	AATTATGATC	CTTAAATATT	60
TGAGAGTCAG	GATGAAGCAG	ATCTGCTGTA	GACTTTTCAG	ATGAAATTGT	TCATTCTCGT	120
AACCTCCATA	TTTTTCAGGAT	TTTGAAGCT	GTTGACCTTT	TCATGTTGAT	TATTTTAAAT	180
TGTGTGAAAT	AGTATAAAAA	TCATTGGTGT	TCATTATTTG	CTTTCCTGTA	GCTCAGATCA	240
AAATGTTTGA	AGAAAGGAAC	TTTATTTTTG	CAAGTTACGT	ACAGTTTTTA	TGCTTGAGAT	300
ATTTCAACAT	GTTATGTATA	TTGGAACCTC	TACAGCTTGA	TGCCTCCTGC	TTTTATAGCA	360
GTTTTATGGG	AGTCACTTGA	AAGAGCGTGT	GTACATGTAT	TTTTTTTCTN	GGCAACATT	420
GAATGCAAC	GTGTATTTTT	TTAATATAAA	TATATAACTT	CCTGCGTCGA	G	471

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 477 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GAATTCGGCC	AAAGAGGCCT	ATGTTTGGCA	ACTGGGGTGA	AGGGATTGCC	CTCCCCCTGC	60
TGGGATCCCC	CCAGCCCCTC	CGGTCTGGCA	GGAAGGGGGC	AGCCTGCAAC	CCCCAAGGGC	120
AGGTGTGGGG	CTGCCAGATG	CTCCAGGCAG	GGGGCCAGAA	GGGGCTCACA	AAGGCTTGCC	180
CTCCAGGGAG	ATGACGGCAC	TGCCCCCAG	CTTCTCTGCC	AGGGTGCAGC	GGTCCTTGAC	240
CTCCTCGTAG	CAGTTTGCTT	GCAATTCATG	CTTGATCCCT	GTCAGCTTCT	TCTTGATGGC	300
GTCCTTGGAG	CTGGCATAAA	TCATTTTGCT	CTTAAGGGGS	GCAGACTCGG	GGGCCCAGAA	360
GATAAACACC	AGATCCTCCT	TCTTGCTCTC	CYTGGTCTCA	TAGGTTGCAT	CATAGAGGGC	420

ATAGCGGCAG TCCTTATCTG GCAGCATCTT GACAAAGGTG GCGTAGGGAT CGTCGAG

477

(2) INFORMATION FOR SEQ ID NO:143:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 411 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC CAAAGAGGCC YMAAAGATCA GCTATTAGAA GAGAAAGATC AGTTAAGTCC	60
TTTGGACTTG ATCAGCTTGA TACAAGAACT ACTGATTTC ACTTCTTTGG CTTAATTCTC	120
TCGGAAACGA TGAAATATAC AAGTTATATC TTGGCTTTTC AGCTCTGCAT CGTTTTGGGT	180
TCTCTGGCT GTTACTGCCA GGACCCATAT GTAAAAGAAG CAGAAAACCT TAAGAAATAT	240
TTTAATGCAG GTCATTGAGA TGTAGCGGAT AATGGAATC TTTTCTTAGG CATTTTGAAG	300
AATTGGAAAG AGGAGAGTGA CAGAAAAATA ATGCAGAGCC AAATTGTCTC CTTTACTTC	360
AAACTTTTAA AAAACTTTAA AGATGACCAG AGCATCCAAA AGAGTGTCTG G	411

(2) INFORMATION FOR SEQ ID NO:144:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 427 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

GAATCGGCCC AAAGAGGCCT ACTGAAGATC AGCTATTAGA AGAGAAAGAT CAGTTAAGTC	60
CTTTGGACCT GATCAGCTTG ATACAAGAAC TACTGATTTC AACTTCTTTG GCTTAATTCT	120
CTCGGAAACG ATGAAATATA CAAGTTATAT CTTGGCTTTT CAGCTCTGCA TCGTTTTGGG	180
TTCTCTGGC TGTTACTGCC AGGACCCATA TGTAAGAA GCAGAAAACC TTAAGAAATA	240
TTTAATGCA GGTCAATCAG ATGTAGCGGA TAATGGAAT CTTTCTTAG GCATTTTGAA	300
GAATTGAAA GAGGAGAGTG ACAGAAAAT AATGCAGAGC CAAATTGTCT CCTTTTACTT	360
CAAACTTTT AAAACTTTA AAGATGACCA GAGCATCCAA AAGAGTGTGG AGACCATCAA	420
GGTCGAG	427

(2) INFORMATION FOR SEQ ID NO:145:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 598 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC AAAGAGGCCT AGAGAAGATA AAAGTGGACA CTGGGGAGAC ACAACTTCAT	60
GCTGCGTGGG ATCTCCCAGC TACCTGCAGT GGCCACCATG TCTGGGTCC TGCTGCCTGT	120
ACTTTGGCTC ATTGTTCAAA CTCAAGCAAT AGCCATAAAG CAAACACCTG AATTAACGCT	180
CCATGAAATA GTTTGTCCTA AAAAAGTTCA CATTTTACAC AAAAGAGAGA TCAAGAACAA	240

CCAGACAGAA	AAGCATGGCA	AAGAGGAAAG	GTATGAACCT	GAAGTTCAAT	ATCAGATGAT	300
CTTAAATGGA	GAAGAAATCA	TTCTCTCCCT	ACAAAAAACC	AAGCACCTCC	TGGGGCCAGA	360
CTACACTGAA	ACATTGTACT	CACCCAGAGG	AGAGGAAATT	ACCACGAAAC	CTGAGAACAT	420
GGAACACTGT	TACTATAAAG	GAAACATCCT	AAATGAAAAG	AATTCTGTTG	CCAGCATCAG	480
TACTTGTGNC	GGGTTGAGAG	GATACTTCAC	ACATCATCAC	CAAAGATACC	AGATAAAAACC	540
TCTGAAAAGC	ACAGACGAGA	AAGAACATGC	CGTCTTTACA	TCTAACCAGG	AGGTCGAG	598

(2) INFORMATION FOR SEQ ID NO:146:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC	AAAGAGGCCT	AGAGCTAAGG	CGAAGACCAA	GACACGTGAC	ATTCATGCTT	60
TGGTGTGGGG	TCCAAAGCAC	TCTTATTTAA	CATAGATTCC	AAACTTTTTA	CACCCATGGG	120
GTCATATATA	CTCTTTATTT	TACCCTTCAT	TATTTTAAAA	ATCACAACAT	CACCCATTGC	180
CCCCGTGTCC	AAAGGAATCG	CTTGTAATAA	ATCAGCAGGT	CTAGAATTCA	ATCGGGAG	238

(2) INFORMATION FOR SEQ ID NO:147:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

GAATTCGGCC	AAAGAGGCCT	AGAGCTAAGG	CGAAGACCAA	GACACGTGAC	ATTCATGCTT	60
TGGTGTGGGG	TCCAAAGCAC	TCTTATTTAA	CATAGATTCC	AAACTTTTTA	CACCCATGGG	120
GTCATATATA	CTCTTTATTT	TACCCTTCAT	TATTTTAAAA	ATCACAACAT	CACCCATTGC	180
CCCCGTGTCC	AAAGGATTCT	CTTGTAATAA	ATCAGCAGGT	CTAGAATTCA	ATCGGGAGGT	240
TCTCCCTATA	GTGAGTCGTA	TTAATTTTCAG	AGGAGTATTT	AGAAGAGAAG	CTGAAGCTGT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:148:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 397 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

GAATTCGGCC	AAAGAGGCCT	ACGACAGTTG	GTGTAAAGGA	AAACTTCTGA	GCTCCGTCAG	60
TTCACCTGGT	ACATTGGAAT	TAAAGTGCTT	GGATGTTTTT	CCCCCACTTT	AAAAAACTT	120
TTGAGGTTTT	TTTTTTTTTT	TGTCTTTTAA	AAACATCGTA	ACATTAACAC	ATGGCCGTTT	180
ACCGTCCCCC	AGCGATGGGA	GCTGGCCTGG	GGCCCAAGGT	CCTCCAGGAT	CTTCACTCAT	240

TCACAGTAAC GGTTCGACC AGTCCTCCAG GTCGCACGTG GATGCGACAG GGGTGGGGAG	300
GGAGGAGGAA GTGACTGTCC CACCTCTGCA GGACCATGGG AGTGGGCAAG GTGTTCTCCG	360
GGGCGCACCC CTGAACCCAG GGGTGCTGCA GGACNTG	397

(2) INFORMATION FOR SEQ ID NO:149:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 592 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

GAATTCGGCC AAAGAGGCCT ATAAGAATTT AAGATGCATT TTTGCATTTG CTATATTTCT	60
TTAAATTCTA GATAGTTATT TTCAAGTGTT GGTAACATA AATCTTAGGC TTAGGAACCA	120
TTGGATTAGT AACAGCATTG TGCTAATCAA AACTTTAAAA AAATGAGTTC AAAATTGTTA	180
TAATGTAATT TTATAGATTT TCTTTTATCC TCAACCTGCA GAAGCCGAA AGTGAGGCAC	240
ATAGCCCCAC ATAGGCAGAA ATTAAAGCCT AGGCAATAAC TTAGTGAAAA TGGAATTTTC	300
AGAACATTCC ACTTCTTGTT TAGTACAATT TTATGGCCAT GGTGCTAGCT AATGGAAATG	360
GCTAGTATAC TATTTATAGG CCAGCAATAT TTTGGTGAAT TTAAGCGAAA CTATGCTCAG	420
TATCATTGAA ATGGGGGTGG GGTGGGCTTG AGACATGAAA TCAATCATAC AAAGTCAAAA	480
ACTATTTTAA CCCAGGAATA AGTTAAATTC CTGTCACCCA GTCGAGGTTT TCCCTATAGT	540
GAGTCGTATT AATTCAGAG GAGTATTTAG AAGAGAAGCT GAAGCTGTCTG AG	592

(2) INFORMATION FOR SEQ ID NO:150:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

GAATTCGGCC AAAGAGGCCT AGATGATGAT ATGTTTAACC ACCAAGTTCC TTATTTGTGG	60
CTGATTTACT GCCTTTGTCA TCCTCTTCAA TCAAGTATTA AAGAAACAGT GGAGGCATAT	120
GAGGCAGCAT TAGGGGTGGC TATGAGATGT GATATAGTAC AGAAGATATG GATGGATTAT	180
CTTGTCTTTG CAAATAATAG AGCTGCTGGA TCCAGAAACA AAGTTCAAGA ATTCAAATTT	240
TTTACTGATT TAGTGAATAG ATGTTTGTTT ACAGNCCCTG CCCGATACCC CATTCCTTTT	300
AGCAGNGCTG ATTACTGGTC CAACTATGAA TTTCAATAA GGGTCGAG	348

(2) INFORMATION FOR SEQ ID NO:151:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

GAATTCGGCC AAAGAGGCCT ACAGAATTGA GAGTTTGTTC TTACACACAA GTTTAATGCC	60
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ACCTTCCTCT GTCTGCCATG GACCAACAAG CAATATATGC TGAGTTAAAC TTACCCACAG      120
ACTCAGGCCC AGAAAGTTCT TCACCTTCAT CTCTTCCTCG GGATGTCTGT CAGGGTTCAC      180
CTTGGCATCA ATTTGCCCTG AAACCTTAGCT GTGCTGGGAT TATTCTCCTT GTCTTGGTTG      240
TTACTGGGTT GAGTGTTTCA GTGACATCCT TAATACAGAA ATCATCAATA GAAAAATGCA      300
GTGTGGACAT TCAACAGAGC AGGAATAAAA CAACAGAGAG ACCGGGTCTC TTAAACTGCC      360
CAATATATTG GCAGCAACTC CGAGTCGAGG TTCTCCCTAT AGTGAGTCGT ATTAATTTC      420
GAGGAGTATT TAGAAGAGAA GCTGAAGCTG TCGAG                                455

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(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

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GAATTCGGCC AAAGAGGCCT AAAAATCTCT TATTAAAGGT AGAACCTCTG CTAGCCAGAC      60
AACTATATTA TTTTGCTCAA CAAAACAGTG GACATTTCTT GAGGGGCTAC GATTTACCAG      120
AACACATCAG CAATCCAGAA GATTACCACA GATCTATCCG CCATTCCTCT ATTCAAGAAT      180
GAAAAATGTC AAGATGAGTG GTTTTCTTTT TCCTTTTTTT TTTTTTTTTT TTTTGATACG      240
GGGATACGGG GTCTTGCTCT GTCTCCAGG CTGGAGTGCA GTGACACAAT CTCAGCTCAC      300
TGTGACCTCC GCCTCCTGGG TTCAAGAGAC TCTCCTGCCT CAGTCGAG                    348

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(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

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GAATTCGGCC AAAGAGGCCT ACCTTAAAGC CGTATACTTA TGAATTTAAA GTGGAAAATT      60
TTTTTGTTGG CCCTGGCCCC CTTGCCAGAT TCCAGCTGGC CGTCAGTGCT CGCGTGCTC      120
TCTGAAGAGG CTCTGCGGTT CTGGTCCCTG TGCCTGAGCT CCAGGTGCCG CCAGACATTA      180
TACAACGTGA AGGCTGAGAT CTTTCCCCCT TCGGGAATGG AGTATTGCAG AACAGGCTCC      240
CTCTGCTCCC TGGAGGTTTT GATCACGAGG CTCTCAGACC TCTTGGAGGT GGATAAAGAT      300
GAAGCACTGA CTGAATCTGA TGAGCATTTT TCGACAAAGC TTATGTATGA AGTTGTCGAG      360

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(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

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GAATTCGGCC AAAGAGGCCT ACTCATCTTG GGTCCCAGCC AGGCCCCCCC AAAACCAAAG      60

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CCCCTTCAAG	TCCTGGGGTC	CCAGCCTGTG	CCCCCAGCTT	CCTGCCCACC	CAGCCCCGAG	120
CATTCTCACA	CAGAGAAAGA	ACAAGCAAGG	GCTCCAGGGG	GACAGGATGG	GGCAGGGCAT	180
ACAGTGGGGG	GTGGGGGGGC	AGCTGGGAGG	AGGGAGGGAC	AAAACAAAAC	ATTTTCCTTT	240
GGGTTTTTTT	TTTCTTTCTT	TTTTCTCCCC	TTTACTCTTT	GGGTGGTGTT	GCTTTTCCTT	300
TCCTTTTCCC	TTTGAGATTT	TTTTGTTGTT	GTTTCCTTTT	TGTATTTTAC	TGATATCACC	360
AGGATAGTTT	ACTCTCCTTC	TAGCTTTCTG	CTTACCGCAC	ACTGGATAAC	ACACACATAC	420
ACACCCACAA	AAATGCTCAT	GAACCCAATC	CGGAGAAGST	TCCAGCAGGT	CCCCCACCCT	480
CCCCTCTCC	TCCTACTTCT	CCTCTTGACA	GCGAGGACAG	GAGGGGGACA	AGGGGACACC	540
TGGGCAGACC	CGCCGGCTCT	CCCCCACCC	CACCCCGTCG	AG		582

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC	AAAGAGGCCT	AGAAATAAAA	CATTCTACAC	CGTCTCCTAC	CAAATATTCA	60
CTATACCAA	GTAAAAGTTA	CAAGGTAAAC	AGGAAAGAAT	GGAATCATT	CATTGTGAAA	120
TTGTTTCTGT	TCTAAGTGTT	TTAAATGCTG	TTTGTTATT	TTTATTTT	TTTTCAGTAT	180
TCTCCGAAA	CACCACCTCG	ATGGACAGAA	GATCGGAATT	CTTTACTGAA	TATGATTGCG	240
CAACAAGTAG	AGGCCATGTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	AAAGAGGCCT	AATTTCTCAG	CTCCAAGCAT	TAGGTAAACC	CACCAAGCAA	60
TCCTAGCCTG	TGATGGCGTT	TGACGTCAGC	TGCTTCTTTT	GGGTGGTGCT	GTTTTCTGCC	120
GGCTGTAAAG	TCATCACCTC	CTGGGATCAG	ATGTGCATTG	AGAAAGAAGC	CAACAAAACA	180
TATAACTGTG	AAAATTTAGG	TCTCAGTGAA	ATCCCTGACA	CTCTACCAAA	CACAACAGAA	240
TTTTTGGAAT	TCAGCTTTAA	TTTTTTGCCT	ACAATTCACA	ATAGAACCTT	CAGCAGACTC	300
ATGAATCTTA	CCTTTTTGGA	TTTAACTAGG	TGCCAGATTA	ACTGGATACA	TGAAGACACT	360
TTTCAAAGCC	ATCATCAATT	AAGCACACTT	GTGTTANCTG	GAAATCCCCT	GATATTCATG	420
GCAGAAACAT	CGCTTAATGG	GCCCAAGTCA	CTGAAGCATC	TTTTCTTAAT	CCANNCGGGA	480
ATATCCAATC	TCGAGTTTAT	TCCAGTGAC	AATCTGGAAA	ACTTGGAAG	CTTGTATCTT	540
GGAAGCAACG	TCGAG					555

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCGCCC	AAAGAGGCCT	AGATGATGAT	ATGTTTAACC	ACCAAGTTCC	TTATTTGTGG	60
CTGATTTACT	GCCTTTGTCA	TCCTCTTCAA	TCAAGTATTA	AAGAAACAGT	GGAGGCATAT	120
GAGGCAGCAT	TAGGGGTGGC	TATGAGATGT	GATATAGTAC	AGAAGATATG	GATGGATTAT	180
CTTGCTTTG	CAAATAATAG	AGCTGCTGGA	TCCAGAAACA	AAGTTCAAGA	ATTCAAATTT	240
TTTACTGATT	TAGTGAATAG	ATGTTTGGTT	ACAGNCCCTG	CCCGATACCC	CATTCTTTT	300
AGCAGNGCTG	ATTACTGGTC	CAACTATGAA	TTTCATAATA	GGGTCGAGGT	TCTCCCTATA	360
GTGAGTCGTA	TTAATTTTCT	AGGAGTATTT	AGAAGAGAAG	CTGAAGCTGT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	NAAGAGGCCT	AAGCAGATGC	TGATCTCATT	ATGCTTGGCC	TTGCCACACA	60
TGAACCGAAC	TTTACCATTA	TTAGAGAAGA	ATTCAAACCA	AACAAGCCCA	AACCATGTGG	120
TCTTTGTAAT	CAGTTTGGAC	ATGAGGTCAA	AGATTGTGAA	GGTTTGCCAA	GAGAAAAGAA	180
GGGAAAGCAT	GATGAACCTG	CCGATAGTCT	TCCTTGTCGA	GAAGGAGAGT	TTATCTTCCT	240
TCGGCTTAAT	GTTCTTCGTG	AGTATTTGGA	AAGAGAACTC	ACAATGGCCA	GCCTACCATT	300
CACATTGAT	GTTGAGAGGA	GCATTGATGA	CTGGGTTTTC	ATGTGCTTCT	TTGTGGGAAA	360
TGACTTCCTC	CCTCATTTGC	CATCGTTAGA	GATTAGGGAA	AATGCAATTG	ACCGTTTGGT	420
TAACATATAC	AAAAATGTGG	TACACAAAAC	TGGGGGTTAC	CTTACAGAAA	GTGGTTATGT	480
CAATCTGCAA	AGAGTACAGA	TGATCATGTT	AGCAGTTGGT	GAAGTTGAGG	ATAGCATTTT	540
TAAAAAGAGA	AAGGATGATG	AGGACAGTTT	TAGAAGACGA	CAGGGTCGAG		590

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGACGGGCCT	CGGTCAGCAG	CACGGGGTGC	TCCTCGGGAG	60
CCACACGCAG	CTCATTGTAG	AAGGTGTGGT	GCCAGATTTT	CTCCATGTCT	TCCCAGTTGG	120
TGACGATGCC	GTGCTCGATG	GGGTACTTCA	GGGTGAGGAT	GCCTCTCTTG	CTCTGGGCCT	180
CGTCGCCCCA	ATAGGAATCC	TTCTGACCCA	TGCCCCACCAT	CACGCCCTGG	TGCCTGGGGC	240
GCCCCACGAT	GGAGGGGAAG	ACGGCCCCGG	GGGCATCGTC	CCCCGCGAAG	CCGGCCTTGC	300
ACATGCCGGA	GCCGTTGTCT	AG				322

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

```

GGGTTGACAA ATATGGACTT CCTCTTTTCT GCCNNCCCAA ACCCATACAT CGGGATTCCT      60
ATAATACCTT CGTTGGTCTC CCTAACATGT AGGTGGCGGA GGGGAGATAT ACAATAGANC      120
AAGATACCAG ACAAGACATA ATGGGCTAAA CAAGACTACA CCAATTACAC TGCCTCATTG      180
ATGGTGGTAC ATAACGAACT AATACTGTAG CCCTAGACTT GATAGCCATC ATCATATCGA      240
AGTTTCACTA CCCTTTTCC ATTTGCCATC TATTGAAGTA ATAATAGGCG CATGCAACTT      300
CTTTTCTTTT TTTTCTTTT CTCTCTCCCC CGTTGTTGTC TCACCATAG      349

```

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 688 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

```

GAATTCGGCC AAAGAGGCCT ACTATAAGAG AGATCCAGCT TGCCTCCTCT TGAGCAGTCA      60
GCAACAGGGT CCCGTCCTTG ACACCTCAGC CTCTACAGGA CTGAGAAGAA GTAAAACCGT      120
TTGCTGGGGC TGGCCTGACT CACCAGCTGC CATGCAGCAG CCCTTCAATT ACCCATATCC      180
CCAGATCTAC TGGGTGGACA GCAGTGCCAG CTCTCCCTGG GCCCCTCCAG GCACAGTTCT      240
TCCCTGTCCA ACCTCTGTGC CCAGAAGGCC TGGTCAAAGG AGGCCACCAC CACCACCGCC      300
ACCGCCACCA CTACCACCTC CGCCGCCGCC GCCACCACTG CCTCCACTAC CGCTGCCACC      360
CCTGAAGAAG AGAGGGAACC ACAGCACAGG CCTGTGTCTC CTTGTGATGT TTTTCATGGT      420
TCTGGTTGCC TTGGTAGGAT TGGGCCTGGG GATGTTTCAG CTCTCCACC TACAGAAGGA      480
GCTGGCAGAA CTCGAGAGT CTACCAGCCA GATGCACACA GCATCATCTT TGGAGAAGCA      540
AATAGGCCAC CCCAGTCCAC CCCCTGAAAA AAAGGAGCTG AGGAAAGTGG CCCATTTAAC      600
AGGCAAGTCC AACGTCGAGG TTCTCCCTAT AGTGAGTCGT ATTAATTTCA GAGGAGTATT      660
TAGAAGAGAA GCTGAAGCTG TCGAGACA      688

```

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```

GAATTCGGCC AAAGAGGCCT AATGATTTTG ATAGGAAGAA TGTCAGCCCA GGTTCCCATG      60
AACATGACCA TCACAGGTTG TATGATGACG TTTTACAGGA CTACGCCGGC TGTGCTGTTC      120
TGGCAGTGGA TTAACAGTC CTTCAATGCC GTCGTCAATT ACACCAACAA AAGTGTGCGAG      180

```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```

GAATTCGGNC AAAGAGGCCT ACCACCTTCT CTGCCAGAAG ATACCATTTC AACTTTAACA      60
CAGCATGATC GAAACATACA ACCAACTTC TCCCGATCT GCGGCCACTG GACTGCCCAT      120
CAGCATGAAA ATTTTATGT ATTTACTTAC TGTTTTCTT ATCACCAGA TGATTGGGTC      180
AGCACTTTT GGTGTGTATC TTCATAGAAG GTTGGNCAAG ATAGAAGATG AAAGGAWYY      240
TYMATKRARR WTTTKKKWY MWKRAACSR WWCARRRRW KSMAMMMRG RRRRRRWCC      300
YYWWCYTWC YTKRWSYTK KRRGRRRW AAARCCMRKT TKGWRGGSYT TKKKRWGRW      360
TTWTWKKTW AAMMAMRRR RRRMSRCGR RARRAAAMR CYTTGNAAT NCNCCNAGGT      420
GATCAGAATC CTCACATTGC GGCACATGTC ATAAGTGAGG CCANCAGTAA AACACATCT      480
GTGTTACAGT GGGCTGANAA AGGATACTAC ACCATGAGCA ACAACTTGGT AACCTTGAA      540
AATGGGAAAC AGCTGNCCGT TAAAAGACAA GGACTCTATT ATATCTATGC CCAAGTCGAG      600

```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```

NCCTGTTTCA TTAATTAAAT TTCCCGAAAG AACCTGAGTC ATTTCCNAC ATGAGAATAC      60
TAGAAGAATG ACCAAGACTT GCGAGACGCG ATTNCCGGG TGGTGCGAAC AATAGANCGA      120
CCATGACCTT GAAGGTGAGA CGCGCATAAC CGTAGAGTA CTTTGAAGAG GAAACANCAA      180
TAGGTTGCTA CCAGTATAAA TAGACAGGTA CATAACAC TGGAAATGGT TGTCTGTTTG      240
AGTACGCTTT CAATTCATTT GGGTGTGCAC TTTATTATGT TACAATATGG AAGGGAAGTT      300
TACACTTCTC CTATGCACAT ATATTAATTA AAGTCCAATG CTAGTAGAGA AG          352

```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

```

GAATTCGGCC AAAGAGGCCT AAAGAAGACA AAGATGATAG GCGGCACAGA GATGACAAAA      60
GAGATTCCAA GAAAGAGAAA AAACACAGTA GAAGCAGAAG CAGAGAAAGG AAACACAGAA      120
GTAGGAGTCG AAGTAGAAAT GCAGGGAAC GAAGTAGAAG TAGAAGCAA GAGAAATCAA      180
GTAAACATAA AAATGAAAGT AAAGAAAAAT CAAATAAACG AAGTCGAAGT GGCAGTCAAG      240
GAAGAAGTGA CAGTGTGAA AAATCAAAAA AACGGGAACA TAGTCCCAGC AAAGAAAAAT      300
CTAGAAAGCG TAGTAGAAGC AAAGAACGTT CCCACAAACG AGATCACAGT GATAGTAAGG      360
ACCAGTCAGA CAAACATGAC CGTCGAG          387

```

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC AAAGAGGCCT AAGGAAGTTG GATGTTTTGA TTTTACTGTT TATAGATGTT	60
AGATTGTACA GATTGTCTG TATTTCTCAC CATATCTAAT GATACTTTTT TCATTAGATT	120
GGTCTTCAAG AACAGTATTA GTTATAATTA TTTTGGTTAT TCAGTATATA GTTAGCTCTT	180
ACAGTTTAGC TTTATTCACC ATATTTATAC TGTGGATTCA CAGCGAGAGG TAGAGGTTAT	240
TCCAGGAGAG TTGATGACCT TCATTTAAAG TCCAACATAA ATCAGTAGTA GAAACATAAG	300
AAAACATCTT TGCAATATTT ACTTTTGTTT CTGTTTGCCG TAAATAGTAA CATTGTTTTT	360
TTTTATTTTG TGTTTGTAT AAAACAGTTG CATTACAAT ATTATTGGCC TGAGATATTG	420
ATGATATTGT GATGGTATGA AAATGTGTAC ATTCCCTGTG CAACATCAGA TTTGCAGGAA	480
AAATGAAGCA CTTACTGAAA TCGCTGGTAC TCGTCGAG	518

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 393 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC AAAGAGGCCT AGGACAAAAC AAAACATTTT CCTTTGGGTT TTTTTTTTCT	60
TTCTTTTTTC TCCCCTTTAC TCTTTGGGTG GTGTTGCTTT TCCTTTCCTT TTCCCTTTGA	120
GATTTTTTTG TTGTTGTTTC CTTTTGTAT TTTACTGATA TCACCAGGAT AGTTTACTCT	180
CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA CATAACACCC CACAAAAATG	240
CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC ACCCTCCCCT CCTCCTCCTA	300
CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG ACACCTGGGC AGACCCGCCG	360
GCTCTCCCCC CACCCACCC CGGCACCTC GAG	393

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 421 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

GAATTCGGCC AAAGAGGCCT ACGAAGTTAC AGAAGTGAAG TTCTCGGGTC CCAGACACGC	60
ACCTATGTAC CTCCCACTGG TGTCCTGCA AAGCCTGGCG CTTTGTGACAT CAATAATAAA	120
AGTGGCAGGG CTGAGCAACA CCTCAGGAGT TACTCTGGAA GGATGGAGGA GTTATGTAAC	180
ACACGAGAGT CAGGAGCCCT GTGGAAGTGC TTTTATTAGC AGTAAGGCTG ATCGTACAAA	240
AAATTCTCAG AGCTTCATAG GACAAGGTAG TACAAGTATG GATGATACAG GACTGAGGAA	300
CGGGGGACGG CTCAAAAGAA ATCAACATCG TCTGGGGCAT CCAGGTCCCG ATATTCCACA	360
ATGGCCCTTG GGTCTCCACG AACCATCCTG TGAGGTGAGA GGTACAGGAT CAGACCTCGA	420
G	421

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 365 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

TAGGAGATCT GGATGGCATC TACTTCGTAT GACTATTGCA GAGTGCCCAT GGAAGACGGG      60
GATAAGCGCT GTAAGCTTCT GCTGGGGATA GGAATTCTGG TGCTCCTGAT CATCGTGATT      120
CTGGGGGTGC CCTTGATTAT CTTCAACATC AAGGCCAACA GCGAGGCTG CCGGGACGGC      180
CTTCGGGGAG TGATGGAGTG TCGCAATGTC ACCCATCTCC TGCAACAAGA GCTGACCGAG      240
GCCAGAAGG GCTTTCAGGA TGTGGAGGCC CAGGCCGCCA CCTGCAACCA CACTGTGATG      300
GCCCTAATGG CTTCCCCTGG ATGCAGAGAA GGCCCAAGGA CAAAAGAAAG TGGAAGNATC      360
TCGAG
  
```

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 463 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AACACAGGAA ACATTACAAT TGAACAATGC CTCAGCTATA      60
CATTTACATC AGATTATTGG GAGCCTATTT GTTCATCATT TCTCGTGTTT AAGGACAGAA      120
TCTGGATAGT ATGCTTCATG GCACTGGGAT GAAATCAGAC TCCGACCAGA AAAAGTCAGA      180
AAATGGAGTA ACCTTAGCAC CAGAGGATAC CTTGCCTTTT TTAAAGTGCT ATTGCTCAGG      240
GCACTGTCCA GATGATGCTA TTAATAACAC ATGCATAACT AATGGACATT GCTTTGCCAT      300
CATAGAAGAA GATGACCAGG GAGAAACCAC ATTAGCTTCA GGGTGTATGA AATATGAAGG      360
ATCTGATTTT CAGTGCAAAG ATTCTCCAAA AGCCCAGCTA CGCCGGACAA TAGAATGTTG      420
TCGGACCAAT TTATGTAACC AGTATTGCA ACCCAGCTC GAG                          463
  
```

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT ACTTAGCTTC AAATCCCTAC TCCTTCACTT ACTAATTTTG      60
TGATTTGGAA ATATCCGCGC AAGATGTTGA CGTTGCAGAC TTGGCTAGTG CAAGCCTTGT      120
TTATTTTCCT CACCACTGAA TCTACAGGTG AACTTCTAGA TCCATGTGGT TATATCAGTC      180
CTGAATCTCC AGTTGTACAA CTTCAATTCTA ATTTCACTGC AGTTTGTGTG CTAAAGGAAA      240
AATGTATGGA TTATTTTCAT GTAAATGCTA ATTACATTGT CTGGAAAACA AACCATTTTA      300
CTATTCCTAA GGAGCAATAT ACTATCATAA ACAGAACAGC ATCCACGCTC GAG                          353
  
```

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

```

GAATTCGGCC AAAGAGGCCT AACTCTGTCT CTTTTTTTCC CCATCTCATT GCTCCAAGAA      60
TTTTTTTCTT CTTACTCGCC AAAGTCAGGG TTCCCTCTGC CCGTCCCGTA TTAATATTTC      120
CACTTTTGGA ACTACTGGCC TTTTCTTTTT AAAGGAATTC AAGCAGGATA CGTTTTTCTG      180
TTGGGCATTG ACTAGATTGT TTGCAAAAGT TTCGCATCAA AAACAACAAC AACAAAAAAC      240
CAAACAACCTC TCCTTGATCT AACTTTTGTG AATTGTTGAT TTCTTTTTTT TATTCTGACT      300
TTTAAAAACA ACTTTTTTTTT CCACTTTTTT AAAAAATGCA CTACTGTGTG CTGAGCGCTT      360
TTCTGATCCT GCATCTGGTC ACGGTCGCGC TCAGCCTGTC TACCTGCAAC AACTCTGAG      419

```

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

```

GAATTCGGCC AAAGAGGCCT ACCCAGAAAC ATCCAATTCT CAAACTGAAG CTCGCACTCT      60
CGCCTCCAGC ATGAAAGTCT CTGCCGCCCT TCTGTGCCTG CTGCTCATAG CAGCCACCTT      120
CATTCCCCAA GGGCTCGCTC AGCCAGATGC AATCAATGCC CCAGTCACCT GCTGCTATAA      180
CTTCACCAAT AGGAAGATCT CAGTGCAGAG GCTCGCGAGC TATAGAAGAA TCACCAGCAG      240
CAAGTGTCCT AAAGAAGCTG TGATCTTCAA GACCATTGTG GCCAAGGAGA TCTGTGCTGA      300
CCCCAAGCAG AAGTGGGTTC AGGATTCCAT GGACCACCTG GACAAGCAAC CCAAACTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

```

TAGGACAAAA CAAAACATTT TCCCTTGGGG TTTTTTTTTT CTTTCTTTTT TCTCCCCTTT      60
ACTCTTTGGG TGGTGTGCTT TTTCCCTTCC TTTTCCCTTT GAGATTTTTT TGTTGTTGTT      120
TCCTTTTTGT ATTTTACTGA TATCACCAGG ATAGTTTACT CTCCTTCTAG CTTTCTGCTT      180
ACCGCACACT GGATAACACA CACATACACA CCCACAAAAA TGCTCATGAA CCCAATCCGG      240
AGAAGGTTCC AGCAGGTCCC CCACCCTCCC CTCCTCCTCC TACTTCTCCT CTTGACAGCG      300
AGGACAGGAG GGGGACAAGG GGACACCTGG GCAGACCCGC CGGCTCTCCC CCCACCCAC      360
CCCGGCAC

```

(2) INFORMATION FOR SEQ ID NO:175:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC	AAAGAGGCCT	AGACTAACCC	AGAAACATCC	AATTCTCAAA	CTGAAGCTCG	60
CACTCTCGCC	TCCAGCATGA	AAGTCTCTGC	CGCCCTTCTG	TGCCTGCTGC	TCATAGCAGC	120
CACCTTCATT	CCCCAAGGGC	TCGCTCAGCC	AGATGCAATC	AATGCCCCAG	TCACCTGCTG	180
CTATAACTTC	ACCAATAGGA	AGATCTCAGT	GCAGAGGCTC	GCGAGCTATA	GAAGAATCAC	240
CAGCAGCAAG	TGTCCCAAAG	AAGCTGTGAT	CTTCAAGACC	ATTGTGGCCA	AGGAGATCTG	300
TGCTGACCCC	AAGCAGAAGT	GGGTCAGGA	TTCCATGGAC	CACCTGGACA	AGCAAACCCA	360
AACTCCGAAG	ACTTCACACG	AG				382

(2) INFORMATION FOR SEQ ID NO:176:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 496 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GAATTCGGCC	AAAGAGGCCT	AGTATAATAC	TAAGTTGAGA	TGATATCATT	TACGGGGGAA	60
GGCGCTTTGT	GAAGTAGGCC	TTATTCTCT	TGTCCTTTCG	TACAGGGAGG	AATTTGAAGT	120
AGATAGAAAC	CGACCTGGAT	TACTCCGGTC	TGAACTCAGA	TCACGTAGGA	CTTTAATCGT	180
TGAACAAACG	AACCTTTAAT	AGCGGCTGCA	CCATCGGGAT	GTCCTGATCC	AACATCGAGG	240
TCGTAAACCC	TATTGTTGAT	ATGGACTCTA	GAATAGGATT	GCGCTGTTAT	CCCTAGGGTA	300
ACTTGTTCCG	TGGTCAAGT	TATTGGATCA	ATTGAGTATA	GAGGTCGCT	TTGACTGGTG	360
AAGTCTTAGC	ATGTACTGCT	CGGAGGTTGG	GTTCTGCTCC	GAGGTCGCCC	CAACCGAAAT	420
TTTAAATGCA	GTTTGGTAG	TTTAGGACCT	GTGGGTTTGT	TAGGTACTGT	TTGCATTAAT	480
AAATTAAAGC	CTCGAG					496

(2) INFORMATION FOR SEQ ID NO:177:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 390 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

TTNGGCCAAA	GGGGCTTAGG	ACAAAACAAA	ACATTTTCCT	TTGGGTTTNA	NTTCTNTCT	60
TTNTTCTCCC	ATTTANTNNT	GGGGTGGTGT	TGCTTTTCCT	TTCCTTTTCC	CTTGAGAGATT	120
TTNTNGTTGT	NGTTTCCTTT	TTGTATTNTA	NTGATATCAC	CAGGATAGTT	TACTCTCNTT	180
NTAGCTNTGT	GCTTACCGCA	CANTGGATAA	CACACACATA	CACACCCACA	AAAATGNTCA	240
TGAACCCCAAT	CCGGAGAAGG	TTCCAGCAGG	TCCCCCACCC	TCCCCTCCTC	CTCNTACTTC	300
TCCTCTNGAC	AGCGAGGACA	GGAGGGGGAC	AAGGGGACAC	CTGGGCAGAC	CCGCCGGCTN	360
TTCCCCCCAC	CCCACCCCGG	CACCTCTCAG				390

(2) INFORMATION FOR SEQ ID NO:178:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 356 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

GAATTCGGCC AAAGAGCAAT TCTCAAACG AAGCTCGCAC TCTCGCCTCC AGCATGAAAG	60
TCTCTGCCGC CTTTCTGTGC CTGCTGCTCA TAGCAGCCAC CTTTATTCCC CAAGGGCTCG	120
CTCAGCCAGA TGCAATCAAT GCCCCAGTCA CCTGCTGCTA TAACTTCACC AATAGGAAGA	180
TCTCAGTGCA GAGGCTCGCG AGCTATAGAA GAATCACCAG CAGCAAGTGT CCCAAAGAAG	240
CTGTGATCTT CAAGACCATT GTGGCCAAGG AGATCTGTGC TGACCCCAAG CAGAAGTGGG	300
TTCAGGATTC CATGGACCAC CTGGACAAGC AAACCCAAAC TCCGAAGACT CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:179:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 480 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

GAATTCGGCC AAAGAGGCCT ACCGAGACTG ACACACTGAA CTCCACTTCC TCCTCTTAA	60
TTTATTCTTA CTTAATAGCC ACTCGTCTCT TTTTTTCCCC ATCTCATTGC TCCAAGAATT	120
TTTTTCTTCT TACTCGCAA AGTCAGGGTT CCCTCTGCCC GTCCCGTATT AATATTTCCA	180
CTTTTGAAC TACTGGCCTT TTCTTTTAA AGGAATTCAG GCAGGATACG TTTTCTGT	240
GGGCATTGAC TAGATTGTTT GCAAAAGTTT CGCATCAAAA ACAACAACAA CAAAAACCA	300
AACAACCTCT CTTGATCTAT ACTTTGAGAA TTGTTGATT CTTTTTTTA TTCTGACTTT	360
TAAAAACAAC TTTTTTTTCC ACTTTTTTAA AAAATGCACT ACTGTGTGCT GAGCGCTTTT	420
CTGATCCTGC ATCTGGTCAC GGTGCGGCTC AGCCTGTCTA CCTGCAGCAC CACTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:180:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

GAATTCGGCC AAAGAGCCTA ACACAGGAAA CATTACAATT GAACAATGCC TCAGCTATAC	60
ATTTACATCA GATTATTGGG AGCCTATTTG TTCATCATTT CTCGTGTTCA AGGACAGAAT	120
CTGGATAGTA TGCTTCATGG CACTGGGATG AAATCAGACT CCGACCAGAA AAAGTCAGAA	180
AATGGAGTAA CCTTAGCACC AGAGGATACC TTGCCTTTT TAAAGTGCTA TTGCTCAGGG	240
CACTGTCCAG ATGATGCTAT TAATAACACA TGCATACTA ATGGACATTG CTTTGCCATC	300
ATAGAAGAAG ATGACCAGGG AGAAACCACA TTAGCTTCAG GGTGTATGAA ATATGAAGGA	360
TCTGATTTTC AGTGCAAAGA TTCTCCAAAA GCCCAGCTAC GCCGGACAAT AGAATGTTGT	420

CGGACCAATT TATGTAACCA GTATTTGCAA CCCACGCTCG AG

462

(2) INFORMATION FOR SEQ ID NO:181:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 463 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC AAAGAGGCCT AACACAGGAA ACATTACAAT TGAACAATGC CTCAGCTATA	60
CATTACATC AGATTATTGG GAGCCTATTT GTTCATCATT TCTCGTGTTT AAGGACAGAA	120
TCTGGATAGT ATGCTTCATG GCACTGGGAT GAAATCAGAC TCCGACCAGA AAAAGTCAGA	180
AAATGGAGTA ACCTTAGCAC CAGAGGATAC CTTGCCTTTT TTAAAGTGCT ATTGCTCAGG	240
GCACTGTCCA GATGATGCTA TTAATAACAC ATGCATAACT AATGGACATT GCTTTGCCAT	300
CATAGAAGAA GATGACCAGG GAGAAACCAC ATTAGCTTCA GGGTGTATGA AATATGAAGG	360
ATCTGATTTT CAGTGCAAAG ATTCTCCAAA AGCCCAGCTA CGCCGGACAA TAGAATGTTG	420
TCCGACCAAT TTATGTAACC AGTATTTGCA ACCCACGCTC GAG	463

(2) INFORMATION FOR SEQ ID NO:182:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

TACGAGAAGT CCTGTAAGAC GTAAATATTT TTAAAATTCA CTGAATTTTT GTCTTTCTCG	60
GTACCATAGA ACACCACAGC CAAGAGATCT CGATCACTGC TTATGATCTT ACTGATGTAC	120
ACACTTTGGA TACACTGGAT GCTCATGTCA AAAGGTGTCA ACTCATCTTC ATCTCCATCC	180
TCTTCTCAC CATCACCTTC TTCTTCTCC TCCTCTTCTT CCCCACCTTC TTCCTCTTCT	240
TCGTCTACCT CATTGTCAGC CTCCTGCTCC CCATTTTCTT CATTAGCATT CCCGTTAGCA	300
GGGGCGTCTC TTCCATTTTC TGCCTCTTCC ACAACTTCTT TCTTCTCCTT TAAGTCCTTG	360
GTGGTGAGT	369

(2) INFORMATION FOR SEQ ID NO:183:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC NAAGANGCCT ATGATCNTCT TCTTTGAAGA AACATGAAGT TACACTATGT	60
TGCTGTGCTT ACTCTANCCA TCCTGATGTT CCTGACATGG CTTCCACAAT CACTGAGCTG	120
TNACAAAGCA CTCTGTGCTA NTGATGTGAG CAAATGCCTC ATTCAGGAGC TCTGCCNGTG	180
CCGGCCGGGA GAAGCAATTG CTCCTGCTGT NAGGAGTGCA TGCTGTGTCT TGGGGCCCTT	240

TGGGACGANT GCTGTGACTG TGTTGGTATG TGTAATCCTC GAAATTATAG TGACACACCG 300
CACCTCNAG 309

(2) INFORMATION FOR SEQ ID NO:184:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC AAAGAGGCCT AATTCTGGTT TAAGATTCTA TCCATTTCTC ACTCTCAGAT 60
 CTGTTTGTTC CACCCTCTCC CCCTAAATAT TTGGATTTTA TATAGACCAG TAGGCTAAGG 120
 TAGGGAAGAC CACTGACAAG TATAAATTTA AGAGTTTACA AAACCAAGGA GGCCATCCAG 180
 CCCCTAGTTC TAAGCCATGT TCAGCACAGT GCCAACTTTG CCTTCCCTGG CTGTCCTTGC 240
 TTGCTTTCTG GTTGCTGTAA TTCTGAGGGG CAACCAGGCT TGCTGTAGAG AGGAGAGCCA 300
 GATGATGTGG AAGCCTAAGG CCACACCCCT CGAG 334

(2) INFORMATION FOR SEQ ID NO:185:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 522 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

TAACCAGCCT TGAAAAGCCC TTCCTCTGGC TTGCTAGGAA GCTCATTGGA GACCCTAACT 60
 TGGAAATTTG TGCCATGCCT GCTCTCGCCC CACCAGAAGT TGTCTGGGAC CCAGCTTTGG 120
 CAGCACAGTA TGAGCACGAC TTAGAGGTTG CTCAGACAAC TGCTCTCCCG GATGAGGATG 180
 ATGACCTGTG AGAATGAAGC TGGAGCCGAG CGTCAGAAGT CTAGTTTTAT AGGCAGCTGT 240
 CCTGTGATGT CAGCGGTGCA GCGTGTGTGC CACCTCATTA TTATCTAGCT AAGCGGAACA 300
 TGTGCTTCAT CTGTGGGATG CTGAAGGAGA TGAGTGGGCT TCGGAGTGAA TGTGGCAGTT 360
 TAAAAAATAA CTTTATTGTT TGGACCTGCA TATTTAGCTG TTTTGGAACG CAGTTGATTC 420
 CTTGAGTTTC ATATATAAGA CTGCTGCAGT CACATCACAA TATTCAGTGG TGAATCTTGT 480
 TTGTTACTGT CATTCCCATC CTTTTCGTT TAGAATCAGA AT 522

(2) INFORMATION FOR SEQ ID NO:186:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC AAAGAGGCCT AGGACAAAAC AAAACATTTT CTTTGGGTT TTTTTTTTCT 60
 TTCTTTTTTC TCCCCTTTAC TCTTTGGGTG GTGTTGCTTT TCCTTTCCTT TTCCCTTTGA 120
 GATTTTTTTG TTGTTGTTTC CTTTTGTAT TTTACTGATA TCACCAGGAT AGTTTACTCT 180

CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA CATAACACACC CACAAAAATG	240
CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC ACCCTCCCCT CCTCCTCCTA	300
CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG ACACCTGGGC AGACCCGCCG	360
GCTCTCCCCC CACCCACCC CGGCACCTC GAG	393

(2) INFORMATION FOR SEQ ID NO:187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCC AAAGAGGCCT ATTCTAGGAC AAGAGCCAGG AAGAAACCAC CGGAAGGAAC	60
CATCTCACTG TGTGTAAACA TGACTTCCAA GCTGGCCGTG GCTCTCTTGG CAGCCTTCCT	120
GATTTCTGCA GCTCTGTGTG AAGGTGCAGT TTTGCCAAGG AGTGCTAAAG AACTTAGATG	180
TCAGTGCATA AAGACATACT CCAAACCTTT CCACCCCAA TTTATCAAAG AACTGAGAGT	240
GATTGAGAGT GGACCACACT GCGCCAACAC AGAAATTATT GTAAAGCTTT CTGATGGAAG	300
AGAGCTCTGT CTGGACCCCA AGGAAACTG GGTGCAGAGG GAGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC AAAGAGGCCT ACAAGAAAGC AAGCTCATCA TACTGGCTAG TGGTGGACCC	60
CAAGCTTAG TAAATATAAT GAGGACCTAT ACTTACGAAA AACTACTGTG GACCACAAGC	120
AGAGTGCTGA AGGTGCTATC TGTCTGCTCT AGTAATAAGC CGGCTATTGT AGAAGCTGGT	180
GGAATGCAAG CTTTAGGACT TCACCTGACA GATCCAAGTC AACGTCTTGT TCAGAAGTGT	240
CTTTGGACTC TCAGGAATCT TTCAGATGCT GCAACTAAAC AGGAAGGGAT GGAAGGTCTC	300
CTTGGGACTC TTGTTAGCT TCTGGGTTCA GATGATATAA ATGTGGTCAC CTGTGCAGAT	360
CTCGAG	366

(2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 421 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

TACAGCCACA TCTGGATACA CACACACACT CTTACATTCA TACCCAGAGA CTGGTGACA	60
GACACACACA CATCCCCGT CTGCCAATC AGTCCCAGGA ACACACAGGT CTCTATCAAC	120
ACCCAGAAAT TCTGACACCA CAAGCACAGG CCAACCTACA GCTAGAGGAT TAATGTCCAG	180

ACCCACAGGC	TGGTGTGCGC	ATGTCCTTCC	ACGTGAATGT	CACATGGGAG	GACAGACTGC	240
ATGGATTTT	TTAATGACAC	TATTTTATTT	ATTTTTTGAG	ACAGAGTCTC	ACTCTGTGCG	300
CCAGGATGGA	GTGCAGTGGC	GTGATCTCGG	CTCACTACAA	CCTCCGCCTC	CTGGGTCAA	360
GCGATTCTCG	TGCCTCAGCA	TCCCAAGTAC	CTGGGATTAC	AGGCGCATGC	CACCACGTCC	420
A						421

(2) INFORMATION FOR SEQ ID NO:190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC	AAAGAGGCCT	AGGGAGATCT	GGATGGCATC	TACTTCGTAT	GACTATTGCA	60
GAGTGCCCAT	GGAAGACGGG	GATAAGCGCT	GTAAGCTTCT	GCTGGGGATA	GGAATTCTGG	120
TGCTCCTGAT	CATCGTGATT	CTGGGGGTGC	CCTTGATTAT	CTTCACCATC	AAGGCCAACA	180
GCGAGGCCTG	CCGGGACGGC	CTTCGGGCAG	TGATGGAGTG	TCGCAATGTC	ACCCATCTCC	240
TGCAACAAGA	GCTGACCGAG	GCCCAGAAGG	GCTTTCAGGA	TGTGGAGGCC	CAGGCCGCCA	300
CCTGCAACCA	CACTGTGATG	GCCCTAATGG	CTTCCCTGGA	TGCAGAGAAG	GCCCAAGGAC	360
AAAAGAAAAA	GGAGGAGCTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:191:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 428 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCGGCC	AAAGAGGCCT	ACCCAGTCC	AGATCCAGGA	CTGAGATCCC	AGAACCATGA	60
ACCTGGCCAT	CAGCATCGCT	CTCCTGCTAA	CAGTCTTGCA	GGTCTCCCGA	GGGCAGAAGG	120
TGACCAGCCT	AACGGCCTGC	CTAGTGGACC	AGAGCCTTCG	TCTGGACTGC	CGCCATGAGA	180
ATACCAGCAG	TTCACCCATC	CAGTACGAGT	TCAGCCTGAC	CCGTGAGACA	AAGAAGCACG	240
TGCTCTTTGG	CACTGTGGGG	GTGCCTGAGC	ACACATACCG	CTCCCGAACC	AACTTCACCA	300
GCAAATACAA	CATGAAGGTC	CTCTACTTAT	CCGCCTTCAC	TAGCAAGGAC	GAGGGCACCT	360
ACACGTGTGC	ACTCCACCAC	TCTGGCCATT	CCCCACCCAT	CTCCTCCCAG	AACGTCACCA	420
GTCTCGAG						428

(2) INFORMATION FOR SEQ ID NO:192:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

GAATTCGGCC	AAAGAGGCCT	AAAGAGCTCT	CACTTCAGTC	TTACTTACCC	CACTGCTATT	60
CCCTGTGGAG	AAAGCCGGCT	AATTGTTTTG	ATAAGGCTAT	CTGCCATTGT	AGAATACCTT	120
TCTCTAGTAG	CTGAATGACA	ATCAACTATA	CGTTCCATAC	TAAACATGCC	AGAGATAGGA	180
CTTTTAGGCC	TTGCTTTACA	AAACTGGTTT	TTAACAGCTG	ACATGAATAT	TTCCCGTTTC	240
TATTTCTTTT	TTTTTTTTTT	TTTTTTTTTT	TGAGACGGAG	TCTCGCTCTA	TCCCCACGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 0 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC	AAAGAGGCCT	AANAGAAGAT	GCCCCTGCTG	ATCACTCTAA	CCTGCTCCTC	60
TTCTGGCTCT	CAGGCTACTC	CATTGCCACT	CAAATCACCG	GTCCAACAAC	AGTGAATGGC	120
TTGGAGCGGG	GCTCCTTGAC	CGTGCACTGT	GTTTACAGAT	CAGGCTGGGA	GACCTACTTG	180
AAGTGGTGGT	GTCGAGGAGC	TATTTGGCGT	GACTGCAAGA	TCCTTGTTAA	AACCACTGGG	240
TCAGAGCAGG	AGGTGAAGAG	GGACCGGGTG	TCCATCAAGG	ACAATCAGAA	AAACCGCACG	300
TTCACCTGTA	CCATGGAGGA	TCTCATGAAA	ACTGATGCTG	ACACTTACTG	GTGTGGAATT	360
GAGAAAACCTG	GAAATGACCT	TGGGGTCACA	GTTCAAGTGA	CCATTGACCC	AGCACCAGTC	420
ACCCAAGAAG	AACTAGCAG	CTCCCCAACT	CTGACCGGCC	ACCACTTGGA	CAACAGGCAC	480
AAGTCCTGA	AGCTCAGTGT	CCTCCCACCC	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC	AAAGAGGCCT	AGCGCCCTGA	AGACAGAATG	TTCCATATCA	GAGCTGTGAT	60
CTTGAGAGCC	CTCTCCTTGG	CTTTCCTGCT	GAGTCTCCGA	GGAGCTGGGG	CCATCAAGGC	120
GGACCATGTG	TCAACTTATG	CCGCGTTTGT	ACAGACGCAT	AGACCAACAG	GGGAGTTTAT	180
GTTTGAATTT	GATGAAGATG	AGATGTTCTA	TGTGGATCTG	GACAAGAAGG	AGACCGTCTG	240
GCATCTGGAG	GAGTTTGGCC	AAGCCTTTTC	CTTTGAGGCT	CAGGGCGGGC	TGGCTAACAT	300

TGCTATATTG AACAACAAC TGAATACCTT GATCCAGCGT TCCAACCACA CTCAGGCCAC	360
CAACGATCCC CCTGAGGTGA CCGTGTTTCC CAAGGAGCCT GTGGAGCTGG GCCAGCCCAA	420
CACCCATC TGCCACATTG ACAAGTTCTT CCTACCAGTG CTCGAG	466

(2) INFORMATION FOR SEQ ID NO:196:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 191 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

TAGGCAGAAT GGGACTCCAA GCCTGCCTCC TAGGGCTCTT TGCCCTCATC CTCTCTGGCA	60
AATGCAGTTA CAGCCCGGAG CCCGACCAGC GGAGGACGCT GCGCCAGGC TGGGTGTCCC	120
TGGGCCGTGC GGACCCTGAG GAAGAGCTGA GTCTCACCTT TGCCCTGAGA CAGCAGAATG	180
TGGATCGACG T	191

(2) INFORMATION FOR SEQ ID NO:197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 614 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC AAAGAGGCCT AATGGATCTC ATGTGCAAGA AAATGAAGCA CTGTGGTTCT	60
TCCTCCTGCT GGTGGCGGCT CCCAGATGGG TCCTGTCCCA GCTGCAGCTG CAGGAGTCGG	120
GCCCAGGACT GGTGAAGCCT TCGGAGACCC TGTCCCTCAC CTGCACTGTC TCTGGTGGCT	180
CCATCAGCAG TAGTAGTTAC TACTGGGGCT GGATCCGCCA GCGCCAGGG AAGGGGCTGG	240
AGTGGATTGG GAGTATCTAT TATAGTGGGA GCACCTACTA CAACCCGTCC CTCAAGAGTC	300
GAGTCACCAT ATCCGTAGAC ACGTCCAAGA ACCAGTTCTC CCTGAAGCTG AGCTCTGTGA	360
CCGCCGCAGA CACGGCTGTG TATTACTGTG CGAGACATTC TGGGCGCAGC AGCTGGTTCA	420
CGTCTACTG GGGCCAGGGA ACCCTGGTCA CCGTCTCCTC AGGGAGTGCA TCCGCCCAA	480
CCCTTTTCCC CTCGTCTCN TGTGAGAATT CCCCCTCGGA TACGAGCAGC GTGGCCGTTG	540
GCTGCCTCGC ACAGGACTTC CTTCCCGACT CCATCACTTT CTCCTGGAAA TACAAGAACA	600
ACTCTGAAC TCGAG	614

(2) INFORMATION FOR SEQ ID NO:198:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 0 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

(2) INFORMATION FOR SEQ ID NO:199:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 427 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

```
GAATTCGGCC AAAGAGGCCT ANACTGCAGC TCTTTTCATT TTGCCATCCT TTTCCAGCTC      60
CATGATGGTT CTGCAGGTTT CTGCGGCCCC CCGGACAGTG GCTCTGACGG CGTTACTGAT      120
GGTGTCTGCTC ACATCTGTGG TCCAGGGCAG GGCCACTCCA GAGAATTACC TTTTCCAGGG      180
ACGGCAGGAA TGCTACGCGT TTAATGGGAC ACAGCGCTTC CTGGAGAGAT ACATCTACAA      240
CCGGGAGGAG TTCGCGCGCT TCGACAGCGA CGTGGGGGAG TTCCGGGCGG TGACGGAGCT      300
GGGGCGGCCT GCTGCGGAGT ACTGGAACAG CCAGAAGGAC ATCCTGGAGG AGAAGCGGGC      360
AGTGCCGGAC AGGATGAGCA GACACAATA CGAGCTGGGC GGGCCCATGA CCCTCACAGA      420
ACTCGAG                                         427
```

(2) INFORMATION FOR SEQ ID NO:200:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

```
TAGGGATGTC AACATGATCT TTTTCATATAT GCTGGCTATA GAAATTGGTC TCGGTGAAGT      60
AATGGTCTGT CTGTCAAGCA TGACATCCTT GCCTGTGTTA AGTTTTTGTT GCTCTTCTGG      120
GATGTTGATC GTGACGTCTT GTCCGGGATT GAGAAGCTTC TGTTGCTCTT CTGGGATGTC      180
ATTTCATGATC TCTTCATATA TGCTGGCTAT AGAAATTGGG CTCTGTGAAG AAATAGTGTG      240
TCCCAACCT TGGTACAGNC CCCCTGGGGA GGGTACCTTT GAAGAACCAG AAGTTAGANC      300
TTGTGAAGAA GAAGAAAGTA GG                                         322
```

(2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```
GAATTCGGCC AAAGAGGCCT ATGGAGTGTG AGAACAGCAA AAAATAATAA TTCAACCAAGT      60
TGGTATTAT GAACATCATT TTCATATTTT TAAAAATATG CTATATCATG GAATTCAATG      120
TAAACCTCA AGAGATGCCA TCCTTGGAGA GGGCTGCACC AGCCTGTGCC CCAAGTTACC      180
CAGGATCACC CCCTACTTCT CCTGACGGCC CCCCGAGAAA GGCCTGCATT CTGGGCGACG      240
TGGCCTTCAG GGGCTCAACC CTTGGCCTCG AG                                         272
```

(2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

GAATTCGGCC	AAAGAGGCCT	AGCCAATTTG	GTTTTCTAAG	TATTTTCACG	CCTTCTCCTC	60
GTGTCCGCGT	CACTGCTCTG	ATTCAGGCC	TTGTCATTTT	TCATCTTTGC	CATTTTAGTA	120
GTTTTGGAT	TGGGCTCCCG	GCTGCTAATT	TTGTCCCCTT	TTCCACTATC	TTCCACATTG	180
TCACCGCAGT	CATGTTTCTA	AGGCAGAATC	TCACTGTGCC	CCACATCGTG	TTGCTGGGCC	240
CTTGCATGCC	GTACCCTGGC	CTTTGTGAAA	TGCCCTTCAT	CTGTGCTCTT	CCCTCCACCT	300
GGAATGTCCG	TCTCTCTTTT	TCTGCCAACC	CACNCGACCC	CTCCCTCCTN	CAAGCCCGTG	360
AGTGTCCCN	CCCTCCATGT	CCTGTGGTGA	CAGAGCTCGA	G		401

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 395 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC	AAAGAGGCCT	ACGATATTTG	CTGCGACCCG	CAGGCGCTAT	CCGCTGCCGG	60
GTTCTGGCGC	GCCCTTTCAG	TTCTGCTTGC	TGTCCGCACC	GNTGCGTTAC	CCGGAACCGC	120
CGGGCCGAAC	AGCATGACGT	CCGCTTTGGA	GAACACATC	AACCGAACTG	TTGCCGTTAT	180
TACATCAGAT	GGGAGAATGA	TTGTGGGAAC	ACTGAAAGGT	TTTGACCAGA	CCATTAATTT	240
GATTTTGGAT	GAAAGCCATG	AACGAGTATT	CAGCTCTTCA	CAGGGGGTAG	AACAAGTGGT	300
ACTAGGATTA	TACATTGTAA	GAGGTGACAA	CGTTGCAGTC	ATTGGAGAAA	TCGATGAAGA	360
AACAGATTCT	GCGCTTGATT	AGGGGAACAC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 395 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC	ANAGAGGCCT	AAGAGCCAGT	AAAAAATTG	TTAGAAAGCA	GATACCATCA	60
AATTGGTTCT	GGGAAGTGTG	AAATCAAAGT	TGCACAACCC	AAAGAGGTAT	ATAGGCAGCA	120
ACAGCAACAA	CAAAAAGGTG	GAAGAGGTGC	TGCAGCTGGT	GGACGAGGTG	GTACGAGGGG	180
TCGTGGCCGA	GGTCAGGGCC	AAACTGGAA	CCAAGGATTT	AATAACTATT	ATGATCAAGG	240
ATATGGAAT	TACAATAGTG	CCTATGCTGG	TGATCAAAAC	TATAGTGGCT	ATGGCGGATA	300
TGATTATACT	GGGTATAACT	ATGGGAAC TA	TGGATATGGA	CAGGGATATG	CAGACTACAG	360
TGGCCAACAG	AGCACTTATG	GCAAGGCATC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 560 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

```
GAATTCGGCC AAAGAGGCCT AGTTTGGTCG TTCGTTGGGC GGTGCTGGTT TTTCGCTCGT      60
CGACTGCGGC TCTTCCTCGG GCAGCGGAAG CGGCGCGGCG GTCGGAGAAG TGGCCTAAAA      120
CTTCGGCGTT GGGTGAAAGA AAATGGCCCG AACCAAGCAG ACTGCTCGTA AGTCCACCGG      180
TGGGAAAGCC CCCC GCCAAA CAGTTGNCCA CGGAAANCCG CCAGGAAAAG CGCTCCNTCT      240
AGCGGCGGGG TGAAGAAGCC TCATCGCTAC AGGCCCGGGA CCGTGCGCT TCGAGAGATT      300
CGTCGTTATC AGAAGTCGAC CGAGCTGCTC ATCCGGAAGC TGCCCTTCCA GAGGTTGGTG      360
AGGGAGATCG CGCAGGATT CAAAACCGAC CTGAGGTTTC AGAGCGCAGC CATCGGTGCG      420
CTGCAGGAGG CTAGCGAAGC GTACCTGGTG GGTCTGTTTC AAGATACCAA CCTGTGTGCC      480
ATCCACGCTA AGAGAGTCAC CATCATGCCC AAAGACATCC AGTTGGCTCG CCGGATACGG      540
GGAGAGAGAG CTTTCTCGAG                                         560
```

(2) INFORMATION FOR SEQ ID NO:206:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 411 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

```
GAATTCGGCC AAAGAGGCCT ACTAGTTTAC TTTATCCCAT CCATTTATAT ATACATATAT      60
ATACACATAT ATGTGTGTTG TTTTGTGTTT GTTTGTGTTT GTTTTGTGTA GATGGAGTCT      120
CGCTCTGTTC CCCAGGCTGG AGTGCAGTGG TGTGATCTTG GCTCACTGCA ACCTCTGCCT      180
CCTGGGTTCA AGCAATTCTC CTGCCTCAGC TTCCCCGAGT AGCTGGGACT ACAGGTGTGC      240
GCCACCACGC CCGGCAAATT TTTTTTTTTT TTTTTTTTTT TTGATATTTT TAGCAGAGAT      300
GAGGTTTCCC CACGTTGGCC AGGCTGGTCT CGAACTCTTG ACCTCAGGTT ATCTGCCTGC      360
CTTGGCCTCC CAAAGTGTG GGATTACAGG CGTGAGCCAC CGAACCTCGA G              411
```

(2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 0 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

(2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 411 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

```
GAATTCGGCC AAAGAGGCCT ACGTGGTGCG CGAGAGCGTA TCCCCAACTG GGA CTTCGA      60
GGCAACTTGA ACTCAGAAC A CTACAGCGGA GACGCCACCC GGTGCTTGAG GCGGGACCGA      120
GGCGCACAGA GACCGAGGCG CATAGAGACC GAGGCACAGC CCAGCTGGGG CTAGGCCCCG      180
TGGGAAAGGA GAGCGTCGTT AATTTATTTT TTATTGCTCC TAATTAATAT TTATATGTAT      240
TTATGTACGT CCTCCTAGGT GATGGAGATG TGTACGTAAT ATTTATTTTA ACTTATGCAA      300
GGGTGTGAGA TGTTCCCNCT GCTGTAAATG CAGGTCTCTT GGTATTTATT GAGCTTTGTG      360
GGA CTGGTGG AAGCAGGACA CCTGGA ACTG CGCCAAAGTA GGCGACTCGA G      411
```

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 152 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```
GAATGCTGAT TGACCAGCTA AAAATCAAAT TACAAGATAG CCAAATAAC TTACAGATTA      60
ATGTATCTGA ACTTCAGACA TTGCAGTCTG AACATGNTAC ACTGCTAGAA AGGCACAACA      120
AGATGCTGCA GGAAACTGTG TCTCAGCTCG AG      152
```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 355 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```
GAATTCGGCC AAAGAGGCCT ACACNTCTGC ACCTCAACCA CAGACTACAC TTGCTGAACT      60
GGCTCCTGGG GCCATGAGGC TGTCAC TGCC ACTGCTGCTG CTGCTGCTGG GAGCCTGGGC      120
CATCCCAGGG GGCCTCGGG ACAGGGCGCC ACTCACAGCC ACAGCCCCAC AACTGGATGA      180
TGAGGAGATG TACTCAGCCC ACATGCCCCG TCACCTGCGC TGTGATGCCT GCAGAGCTGT      240
GGCTTACCAG GTGAGTCCTT CACCACTGTC ACCCTGCCCT GCTCACACCC CTTCTCAAGC      300
CAGACCCCTC CACCCACCTC ACATTCCACC ACCGGCCTTT GATCCCCGCC TCGAG      355
```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 403 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

GAATTCGGCC	AAAGAGGCCT	AATTATAAGC	ACTCAATAAT	ACATTATCAA	CTATTATTAC	60
TCAATTAAAA	CTGGTTAACT	TTAATTGAAT	TTGAACTGCC	ACCTAGAATA	GACAAGAAAA	120
TGAAACACAA	TTCTGTATGG	ATGTCAGAAA	CATGAAATAT	AAAATGTAAT	AAATAAAAAAT	180
ATTAAAAACC	CCTTAGCAAA	TGTTAAGGAG	CGTGTCAAAT	GATTCCTGTG	TTGAACCTTA	240
AGCATTTAGG	TGGCTGGAGC	CTTGAAAGTT	ACCATCCCCC	AATTTTCTGC	TGTGTCACTA	300
GGTTTTTTTC	TATTGAGCAA	TTCTTTCAGG	TCGCCTCCAC	TCTGCTCTGC	CTAAAGGACA	360
ACTTCATATA	GTGCATTCTG	GTCTTAGACT	CCACGATCTC	GAG		403

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

GAATTCGGCC	AAAGAGGCCT	AAGCGCTAAG	CCTGGAGTGT	GGGCACTGCA	GTTTCAGAGG	60
CACCGATTAT	GAGAATGTGC	AGCTCCACAT	GGGCTCCATT	CATCCTGAGT	TCTGTGATGA	120
TATGGATGCC	GGGGGCCTGG	GCAAGCTCAT	CTTTACCAG	AAGAGTGCAA	AGCTCTTCCA	180
TTGCCATAAG	TGCTTCTTCA	CCAGCAAGCT	GTACGCCAAT	GTGTACTATC	ACATCACGGC	240
CAGACACGCA	GCCTCGGACA	AGTGGAGTGA	GCAGCCGAAA	GAGCAGCCGA	GCAAAGACAC	300
CCGTCGAG						308

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

GAATTCGGCC	AAAGAGGCCT	ACTGTGGTAA	TTCTAGAGCT	AATACATGCC	GACGGGCGCT	60
GACCCCTTC	GCGGGGGGGA	TGCGTGCATT	TATCAGATCA	AAACCAACCC	GGTCAGCCCC	120
TCTCCGCCCC	CGGCCGGGGG	GCGGGCGCCG	GCGGCTTTGG	TGACTCTAGA	TAACCTCGGG	180
CCGATCGCAC	GGCCCCCGTG	GCGGCGACGA	CCCATTGCAA	CGTCTGCCCT	ATCAACTTTC	240
GATGGTAGTC	GCCGTGCCTA	CCATGGTGAC	CACGGGTGAC	GGGGAATCAG	GGTTCGATTG	300
CGGAGAGGGA	GCCTGAGAAA	CGGTTACCAC	ATCCAAGGAA	GGCAGCAGGC	GCGCACCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

GAATTCGGCC	AAAGAGGCCT	ATTCTTTTTT	AAACTAATCA	CCATATTGTA	AATTTCAGGG	60
TTTTTTTTTT	GGTTAAGCT	GACTCTTNGC	TCTAATTTTG	GAAAAAAGA	AATGTGAAGG	120
GTCAACTCCA	ACGTATGTGG	TTATCTGTGA	AAGTTGCACA	GCGTGGCTTT	TCCTAAACTG	180
GTGTTTTTCC	CCCGCATTTG	GTGGATTTT	TATTATTATT	CAAAAACATA	ACTGAGTTTT	240
TTAAAAGAGG	AGAAAATTTA	TATCTGGGTT	AAGTGTATT	CATATATATG	GGTACTTTGT	300
AATATCTAAA	AACTTAGAAA	CGGAAATGGA	ATCCTGCTCA	CAAAATCACT	TTAAGATCTT	360
TTCGAAGCTG	TTAATTTTTC	CTAGTGTGT	GGACACTGCA	GACTTGTCCA	GTGCTCCAC	420
GGCCTGTACG	GACACGACTC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

GAATTCGGCC	AAAGAGGCCT	ACTTCACTCT	CTCATTCTTA	GCTTGAATTT	GGAAATGACT	60
TTTGATGACC	TAAAGATCCA	GACTGTGAAG	GACCAGCCTG	ATGAGAAGTC	AAATGGAAAA	120
AAAGCTAAAG	GTCTTCAGTT	TCTTTACTCT	CCATGGTGGT	GCCTGGCTGC	TGCGACTCTA	180
GGGGTCTTT	GCCTGGGATT	AGTAGTGACC	ATTATGGTGC	TGGGCATGCA	ATTATCCCAG	240
GTGTCTGACC	TCCTAACACA	AGAGCAAGCA	AACCTAACTC	ACCAGAAAAA	GAAACTGGAG	300
GGACAGATCT	CAGCCCGGCA	ACAAGCAGNA	GAAGCTGTTC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC	AAAGAGGCCT	ACTGGGGAGT	CTGCTATATT	GTTGTTAAGG	TCTCTTTGTT	60
AGTGGTGGTA	GAAATTGGAG	TATTCCTCT	CATTGTGGT	TGGTGGCTGG	ATATCTGTC	120
CTTGAAATG	TTTGATGCTA	CTCTGAAAGA	TCGAGAACTG	AGCTTTCAGT	CGGCTCCAGG	180
TACTACCATG	TTTCTGCATT	GGCTAGTGGG	AATGGTATAT	GTCTTCTACT	TTGCCTCCTT	240
CATTCTATTA	CTGAGAGAGG	TACTTCGACC	TGGTGTCTG	TGGTTTCTAA	GGAATTTGAA	300
TGATCCAGAT	TTCAATCCAG	TACAGGAAAT	GATCCATTG	CCAATATATA	GGCATCTCCG	360
AAGATTTATT	TTGTCAGTGA	TTGTCTTTGG	CTCCATTGTC	CTCCTGATGC	TTTGGCTTCC	420
TATACGTATA	ATTAAGAGTG	TGCTGCCTAA	TTTTCTTCCA	TACAATGTCA	TGCTCTACAG	480
TGATGCTCCA	GTGAGTGAAC	TGTCCCTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC	AAAGAGGCCT	AGTTTATACC	CACAGAATTT	TTTCATAAAA	TTAACCAAAC	60
CCTTTTCACT	TTGCTTAAGA	CTTCAGTTTT	GTCCCATTAC	TCTTTAAGGT	TAAGACCATC	120
TATAAAATCC	TCTGAAGTGG	ACAAAATTAC	ATTCTCTTTA	NCAAAATCCA	TATTCCTATG	180
CCTTTCTTATA	ATCTTTTACC	AAAAACACCT	TCCCTATACA	CCTTGACGT	AAAACGTGTT	240
CTCCAGTGGT	CTCAACTACA	TATTATACTG	TTAACTCTTA	CTCCTTTTAG	CATAGCTAGT	300
AGGCATGGCT	CTCCATATGT	TCCCAGGCAT	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 167 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC	AAAGAGGCCT	AGTGGGTAGA	TACAGACCCT	AACTTTGAGC	TCTAAGATGA	60
AATTTGTTTA	TAAATCCCTA	GTTTCATTTC	AGTTTTTTCA	ATATTTATCA	AACACCTACT	120
GTGCCAGGCA	TTGTTTAGGC	ACAGGGGATA	CAGCAGAAAA	ACTCGAG		167

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 377 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC	AAAGAGGCCT	ACACACGCCT	TTGGCACAAT	GAAGTGGGTA	ACCTTTATTT	60
CCCTTCTTTT	TCTCTTTAGC	TCGGCTTATT	CCAGGGGTGT	GTTTCGTCGA	GATGCACACA	120
AGAGTGAGGT	TGCTCATCGG	TTTAAAGATT	TGGGAGAAGA	AAATTTCAA	GCCTTGGTGT	180
TGATTGCCTT	TGCTCAGTAT	CTTCAGCAGT	GTCCATTGTA	AGATCATGTA	AAATTAGTGA	240
ATGAAGTAAC	TGAATTTGCA	AAAACATGTG	TTGCTGATGA	GTCAGCTGAA	AATTGTGACA	300
AATCACTTCA	TACCCTTTTT	GGAGACAAAT	TATGCACAGT	TGCAACTCTT	CGTGAAACCT	360
ATGGTGAAAC	CCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 310 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

```

CTTGGGGGTG GGTTCNNNT ANNAAAAATT ANAGNCGTTG GGGGTTGGGG GGCNGAGAAG      60
GAANANAGAA CCCCNNGNAA AATTTGAAAA CNGGGTNATT TATCCNGTNT TTTNAANGAG      120
AATCCCANNC CCGGAAAAAA AAAAAAANG AGGAANANAN AGATTGTAAG TAAAAACAAA      180
AATCTATCTG TATAAGTCTT TACTTGTACA AGTCTGTACA AGTCAGTNAG GTTTGGTCTC      240
TGCAGAGCCA GAACTTCAGA GAAGGTGATT TAATTGTAGG CNTCTTTGGT AGGCCTCTTT      300
GGCCGAATTC                                     310

```

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

```

GAATTCGCCC AAGAGGCCTA AAGAGGCCTA GAAGCCAAAA AACTTTTCCC GAAAGGAGTC      60
TTCACCAAAG AGCTCCCATC TGGCAAGAAA TACCTCCGCT ACACACCCCA GCCTTAAGTC      120
TCTTGAGAAA GCTGGTGCTG TGAGCCAGAG GATGTCAGCT GCCAATTGTG TTTTCTGCA      180
GCAATTCCAT AAACACATCC TGGTGTATC ACAGCCAAGG TTTTtaggTT GCTATACCAA      240
TGGCTTATTA AATGAAAATG GCACTAAAAG TTTCTTGAGA TTCTTTATAC TCTCTGCCTT      300
CAGCAATCTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

```

GAATTCGGCC AAAGAGGCCT AGGAACCACT GGCTTGGTGG ATTTTGCTAG ATTTTCTGA      60
TTTTTAAACT CCTGAAAAT ATCCAGATA ACTGTCATGG AGCTGGTAAC TATCTTCTG      120
CTGGTGACCA TCAGCCTTTG TAGTTACTCT GCTACTGCCT TCCTCATCAA CAAAGTGCCC      180
CTTCCTGTTG ACAAGTTGGC ACCTTTACCT CTGGACAACA TTCTTCCCTT TATGGATCCA      240
TTAAAGCTTC TTCTGAAAAC TCTGGGCATT TNTGTTGGGC ACCTTGTTGA GGGGCTAAGG      300
AAGTGTGTAA ATGAGCTGGG ACCAGAGGCT TCTGAAGCTG TGGAGCAACC GCTCGAG      357

```

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```

GAATTCGGCC AAAGAGGCCT ATTAAATGTG TCATTGGAAG CCATCCCTTT TTTTACATTT      60
CATACAACAG AAACCAGAAA AGCAATACTG TTTCCATTTT AAGGATATGA TTAATATTAT      120

```

TAATATAATA ATGATGATGA TGATGATGAA AACTAAGGAT TTTTCAAGAG ATCTTTCTTT 180
 CCAAAACATT TCTGGACAGT ACCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:224:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

TNAAACCAAT AGTTTTTTTAA AAGACAAGCT TGGGTGGGTG CANGNTGGGG ACAGTGCTGG 60
 TCTTTCACNG CAGCCCAGGC ACCCNTTGAG AGTCCCAGNG NGNGTNATGC CCCGAGCCAG 120
 TNAAGATGAA GGGAGAGCGG GTGCGGGGGC CATCNTCGGN GTCCCAGCCC GGCCCATGGG 180
 ANTGAGTNGC GGCCTCTGCT TGTCGACNTG GGNGCTGGCT GTCCNATTTT ACTACTATTG 240
 ACCCTGAAGG CCATCGAGGA GGGCACGATG GAGGAGATCG AAGAGGAGGT CCGGCAGAAG 300
 AAATCATCAC GGAAGCGCAA GCGAGACTAG GCNTCTNTGG CCGAATTC 348

(2) INFORMATION FOR SEQ ID NO:225:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 483 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GAATTCGGCC AAAGAGGCCT ACTTTCTCTG CAGATCATGG GGCCCTTGAT TGTGCTTGTT 60
 GGATTGTGTT TCTTCGTGGT TGCCCATGTT AAGAAGAGAA ACACGCTGAA TGCTGGCCAG 120
 GATGCCTCTG AGAGAGAAGA GGGACAGATC CAGATTATGG AGCCTGTCCA GGTCACTGTA 180
 GGTGACTCGG TAATAATATT TCCACCCCCT CCACCACCTT ACTTTCCTGA ATCTTCAGCT 240
 TCTGCGGTCG CTGAGAGTCC TGGAACTAAC AGTCTGCTTC CGAATGAAAA CCCCCCTTCA 300
 TATTACAGTA TTTTCAACTA TGGCAGGACC CCAACTTCAG AGGGTGCAGC CTCTGAAAGA 360
 GATTGTGAAT CTATATATAC CATTTCTGGG ACGAATTCAT CTCTGAGGC CTCACACACT 420
 CCACATCTTC CATCTGAATT GCCTCCTAGA TATGAAGAAA AAGAAAATGC TGCAGCACTC 480
 GAG 483

(2) INFORMATION FOR SEQ ID NO:226:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 500 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

GAATTCGGCC AAAGAGGCCT ACGATTACAA TCATGATTTT CAGAATGGAG AAGATGACGA 60
 TGATGATGAA GATATTGATT ATGTTTGCTC TTGGAATGAA CTACTGGTCT TGCTCAGGTT 120
 TCCAGTGTA CGACTACGAT CCATCCTCCT TAAGGGATGC CCTCAGTGCC TCTGTGGTAA 180

AAGTGAATTC	CCAGTCACTG	AGTCCGTATC	TGTTTCGGGC	ATTCAGAAGC	TCATTAAAAA	240
GAGTTGAGGT	CCTAGATGAG	AACAACTTGG	TCATGAATTT	AGAGTTCAGC	ATCCGGGAGA	300
CAACATGCAG	GAAGGATTCT	GGAGAAGATC	CCGCTACATG	TGCCTTCCAG	AGGGACTACT	360
ATGTGTCCAC	AGCTGTTTGC	AGAAGCACCG	TGAAGGTATC	TGCCCAGCAG	GTGCAGGGCG	420
TGCATGCTCG	CTGCAGCTGG	TCCTCCTCCA	CGTCTGAGTC	TTACAGCAGC	GAAGAGATGA	480
TTTTTGGGGA	CACTCTCGAG					500

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

GAATTCGGCC	AAAGAGGCCT	AGGAGAAAGA	AGATATTGAC	ACCATCTACG	GGCACCATGG	60
AAGTCTTCA	AGTGACCATT	CTTTTCTTC	TGCCCAGTAT	TTGCAGCATT	AACAGCACAG	120
GTGTTTTAGA	GGCAGCTAAT	AATTCACCTG	TTGTTACTAC	AACAAAACCA	TCTATAACAA	180
CACCAAACAC	AGAATCATT	CAGAAAATG	TTGTCACACC	AACAACTGGA	ACAACCTCCTA	240
AAGGAACAAT	CACCAATGAA	TTACTTAAAA	TGTCTCTGAT	GTCAACAGCT	ACTTTTTTAA	300
CAAGTAAAGA	TGAAGGATTG	AAAGCCACAA	CCACTGATGT	CAGGAAGAAT	GACTCCATCA	360
TTTCAAACGT	AACAGTAACA	AGTGTTACAC	TTCCAAATGC	TGTTTCAACA	TTACAAAGTT	420
CCAAACCCAA	GACTGAAACT	CAGAGTTCAA	TTAAAACAAC	AGAAATACCA	GGTAGTGTTT	480
TACAACCAGA	NCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

GAATTCGGCC	AAAGAGGCCT	ACTTTTTTTAA	TATAAATTTT	GTTGATATGG	AATTAGGTAA	60
TTTTAAGTGT	CTATGTGCAT	ATGTTTTTTA	TATAAGTTTT	TTCTATTCAG	TTTCACNGAT	120
CCAACTGGCA	GTGGGTAAAT	ATGGCGAGCT	CGAG			154

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

GAATTCGGCC	AAAGAGGCCT	AGGAATGGTT	TTNATTGGT	CCTTATTTT	AACCTGCCCC	60
TGAGACTTAT	ATGCTTGTTT	ATACCATGTA	CGTAGTGTGT	GATTGTATGT	GTTTGTATTT	120

```

GTCCACATGT CCCAAAACAT GGGCTGTTAC TCCCTTTTCT ATCTTGTTTT CCTTATTCCC      180
ACCCTTCTCT TTCCACCCAG GTATCTGGAC AGGAAGACTT CTACCATCAG CTTTACCAGA      240
GGAAGCTGCA GGCCCCACTG TGGCCCAGCT CCCTGGGCAT CACTGATTGC TATCAGTATG      300
TCACCTCTCG TCACCCCAAG AGATCAGAGA GACGCAAGTA TGGCCGAGAC TTCCTGTAC      360
GTTTCCGCTT CTGCAGCATC GCTCGAG                                         387

```

(2) INFORMATION FOR SEQ ID NO:230:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC AAAGAGGCCT ACCTTCATTT GTTAGATTAT ATCAGTACCC CAACTTTGCT      60
GGACCTCATG CAGCTTTAGC TAATAAAAGT TTCTTTAAGG CAGATAAAGT TACAATGCTG      120
TGGAATAAAA AAGGTATGTT AAGTATATTT TATCCCTCCC TTTGTTTATC AGTTGTTAAT      180
TTAGGCTATA TTCCTATGTG TATAACAGAA GAATCAATGC CCATTTGTGT TTAAATCTA      240
ATTAAAGTTT TTACTGTTAT AGCTACTGCT GTGTTGGTAA TAGCTAGCAC AGATGTTGAC      300
AAGACAGGAG CTCCTACTA TGGAGAACGA CTCGAG                                         336

```

(2) INFORMATION FOR SEQ ID NO:231:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 479 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCC AAAGAGGCCT AGGGACATTG GTTGAATTGG CATGACTAGA ATAGTTGGGA      60
ATGTTTGGGA ATGGGGAGAG ATTGCTAATG GGATGTCTGC CAGGGGCAAT ACTGAAATCT      120
GCTGTTGGT AAAGGTAGTG CCTGAGCCCA GTGCTAACCA TAGTAGTTGG AAAATTGTGT      180
ACGTTGGCTG TGGAATCCTT ATGCGAATAT TTGTCCAATC CATCTAAATT TCTCTCTGCA      240
GCATTTTAA AAAGACATAT AGCTGAAATT TTGTCAGTCC TAAAAATATT TTGATTTCT      300
CTGCCCAGAT TTGCATTTGG GTAGATCGTG CTGTAGAAGA TATATCTTGC TTAAAGATAG      360
CTGCCACTGA TTAGTTTATT TTAGTCTATT TTAATCAACT TATTGCCTTG TAATCTTTCC      420
TTTTTCATTC TCTAAATTC TGAAATTCTA TCTTTCATGT TCCCCAGGAA ACACTCGAG      479

```

(2) INFORMATION FOR SEQ ID NO:232:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 338 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGGCCT ACATGATGTC AACAAACCGTG GCTCACAAGA TGAAAGAGCA      60

```

CATTCCTTTT	TTTGAAGATA	TGTGTAAAGG	CATTAAAGCT	GGTGACACCT	GTGAGAAGCT	120
GGTGGGATAT	TCTNCCGTGT	ATAGAGTCTG	TTTTGGAATG	GCTTGTTTCT	TCTTTATCTT	180
CTGTCTACTG	ACCTTGAAAA	TCAACAACAG	CAAAAGTTGT	AGAGCTCATA	TTCACAATGG	240
CTTTTGGTTT	CTTTAAACTT	CTGCTGTTGG	GGGCCATGTG	CTCAGGAGCT	TTCTTCATTG	300
CAGATCAGGA	CACCTTCTG	AACGCCGGGC	AGCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

GAATTCGGCT	TCATGGCCTA	CCCCGAACCA	CTCAGGGTCC	TGTGGACAGC	TCACCTAGTG	60
GCAATGGCTC	CAGGCTCCCG	GACGTCCCTG	CTCCTGGCTT	TTGCCCTGCT	CTGCCTGCCC	120
TGGCTTCAAG	AGGCTGGTGC	CGTCCAAACC	GTTCCGTTAT	CCAGGCTTTT	TGACCACGCT	180
ATGCTCCAAG	CCCATCGCGC	GCACCAGCTG	GCCATTGACA	CCTACCAGGA	GTTTGAAGAA	240
ACCTATATCC	CAAAGGACCA	GAAGTATTCA	TTCCTGCATG	ACTCCCAGAC	CTCCTTCTGC	300
TTCTCAGACT	CTATTCCGAC	ACCCTCCAAC	ATGGAGGAAA	CGCAACAGAA	ATCCAATCTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

GAATTCGACC	TTCATGACCT	AGCGTAAGAG	GAGAGAGACA	CATTCAGCAG	CCAAAGGACT	60
CGGTGGAAAG	AGCAGAACAC	CATAGACAAT	ATGTCGCTCT	TGGGACCCAA	GGTGCTGCTG	120
TTTCTTGCTG	AATTCATCAT	CACCTCTGAC	TGGATACCCC	TGGGGGTCAA	TAGTCAATCG	180
AGGAGACGAT	GTGACTCAAG	CGACTCCAGA	AACATTCAAC	GAAGATCCTA	ATCTGGTGAA	240
TGATCCCCGCT	ACAGATGAAA	CAGTTTTGGC	TGTTTTGGCT	GATATTGCAC	CTTCCACAGA	300
TGACTTGGAG	TGCTGGGATG	AGAAATTTAC	CTGCAGCAAG	GCTCTACTCT	GTGCATCGGC	360
CGTTAAACT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

GAATTCGGCC	TTCTGGCCTA	GGGTGGGATA	AGTGATTNGT	ATTTGTTTNG	GTTTAAAAAC	60
------------	------------	------------	------------	------------	------------	----

ATACTTTGAT AGAAATTAGT CCCTTCTTT TCCTTCTCTT CTACAATGTC AATTGCCCAT	120
TTCATTTGTG TGTTTCTAAC ATTTTCTTTT GTTAAGAAAT GTTGGGGCTA TAATTTTTTT	180
GAAATCACTG AAGGAGGGGG AAAAATAATT TTAACAACCT GTGTTGAAAC CTTCCATAGC	240
TTAATTGACT GGAATAATCC TGCCATCATT AATAAGATGT ACAAGGTGTA CCTTGGAGAT	300
ATACCACTGA AGACAAAGA GGAGCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:236:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 107 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

TTACACCCTG GAAACCAAGC ATAAGCACAC TTTAGCAGA TGAAGTAGAA ATTAAGTTGT	60
TTGAATCNAG TGAACACACT GAAGACTCCA ACAACCCACA ACTCGAG	107

(2) INFORMATION FOR SEQ ID NO:237:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 338 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

GAATTCGGCC TTCATGGCCT ACCCGTCGTT AGTGAAGGGG AAATGGGTTG TATCCTAAGG	60
GATTGGGAAA TGGGAAGTGA ATTTCAAGAG ATTGTGGAGT ACAAGGTATG TGTTTACGTT	120
AGGTGATGAG CAGTGTCAGG ATAGTGAAGT GTGGACAGTG TCAAATGCTT TTCTGTAGGG	180
AAGATGAAGT TAGCATCATC TTATCACTTT TGACATGCTT TTGTGGTTTA TTTTGTTTTG	240
TATTTCTGTTT TTAGTAGAAA TGAAAGGCTT TGCCAAAGCC TCTGTACTAT GCTTCAGAGT	300
AGGACACACA ATTCTGAGAT TGCTGTAGAG GGCTCGAG	338

(2) INFORMATION FOR SEQ ID NO:238:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGGCC TTCATGGCCT AGTCAGAGCC AAAGGAAAGC TTGAAAAATG AAGACATTAG	60
CAGGACTTGT TCTGGGACTT GTCATCTTTG ATGCTGCTGT GACTNCCCA ACTCTAGAGT	120
CCATCAACTA TGAAGCAGAA ACCTATGATG CCACCTTAGA AGACCTGGAT AATTTGTACA	180
ACTATGAAAA CATACTGTT GATAAAGTTG AGATTGAAAT AGCCACAGTG ATGCCTTCAG	240
GGAACAGAGA GCTCCTCACT CCACCCCAAC AGCCTGAGAA GGCCAGGAA GAGGAAGAGG	300
AGGAGGAATC TACTCCAGG CTGATTGATG GCTCTTCTCC CCAGGAGCCT GAATTCACAG	360
GGGTCTCTGG GCCACACACA AATGAAGACT TTCCAACCTG TCTTTTGTGT ACTTGTATAA	420

GTACCACCGT GTACTGTGAT GCCCATGAAC TCGAG

455

(2) INFORMATION FOR SEQ ID NO:239:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

```

GAATTCGGCC AAAGAGGCCT AGGGGGGTGA TGGTGTGTGC TTTGGACTGT GTGCCTACAG      60
GGTTTTTTTG TTTTGTTTTG TTTTACTGTA ATGGAAATGG GTTTAGGATA AGCATACTCA      120
AAGCTCCACA GTGTATCCTT GAGCTTTCCA TGACTGCCAG TTACACACTG GAGAGGGTTA      180
AATGAATCTT AAAGTGTTC A TGATTACTAT TAAATATCAT TATAAAACAA ATTCTTTCGG      240
GGGGGCACAA ATGCTAATAT GTACAAGAAA ATCTTAGACT TGAAAATATC TTTAAATGA      300
AAATAACTTT TTTTTCAGC TGACTGTATT CACAACCTTG ATGGATGTTA CCAAAGGTCA      360
ATTTGAAAGT CACCTTCGAG ATTGCCCAGA CCCTTGATA GGCTGGTGAG CACACGTTGG      420
CCAGCCTCGA G                                     431

```

(2) INFORMATION FOR SEQ ID NO:240:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACTACAATCC GTGGCTGCTC NTTCTTGCCT ACTTTACTCT      60
CCCACTGAAG CAGGTTANCG TTGAAGGTGG TATGGAAAAG CCTGCATGCC TGTCAATTC      120
TTTTGTTTCT TCTCCTTCCC CCTCCCCTA CCTCCTTCCC CTACCTCCTT CGCTCGAG      178

```

(2) INFORMATION FOR SEQ ID NO:241:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT ACATCAACAG CATCAAGTCC AGACTAAGCA AAAGTGGGCA      60
CATACAAACT CTGCTTAGAG CATTGAAGC TCGTGATCGA AACATACAAG AAAGCAACTT      120
TGATAGAGTC AATTTCTGGT CTATGGTTAA TTTAGTGGTC ATGGTGGTGG TGTGAGCCAT      180
TCAAGTTTAT ATGCTGAAGA GTCTGTTTGA AGATAAGAGG AAAAGTCTCG AG          232

```

(2) INFORMATION FOR SEQ ID NO:242:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 195 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```
GAATTCGGCC TTCATGGCCT ACAAACCTA ACTTGCAGC AAAACAAGAT GAGATTGGCA      60
TGGCTTTATT TGTTTTTTTT GTTTGTTTT GGTTTTTTT TTTTTTTGG CTTGACTCAG      120
GATTTAAAAA CTGGAACGGT GAAGGTGACA GCAGTCGGTT GGAGCGAGCA TCCCCCAAAG      180
TTCATGGGCG TCGAG                                     195
```

(2) INFORMATION FOR SEQ ID NO:243:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCC TTCATGGCCT ACATATCCTC AAATGGTAGT CATCTGGGGA CTAAGCAACA      60
GGTGTTCCTAA GGAACCTAATT CTCTGGGTTT GAAAGTTCA CAGTCTGTGC AGTCTATTCG      120
TCCTCCATAT AACCGAGCAG TGCTCTGGA TAGCCCTGTT TCTGTTGGCT CAAGTCCTCC      180
AGTAAAAAAT ATCAGTGCTT TCCCATGTT ACCAAAGCAA CCCATGTTGG GTGGGAATCC      240
AAGAATGATG GATAGTCAGG AAAATTATGG CTCAAGTATG GGAGACTGGG GCTTACCAAA      300
CTCAAAGGCC GGCAGCGGAC TCGAG                                     325
```

(2) INFORMATION FOR SEQ ID NO:244:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 342 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGGAGGCTAT TTTAGGATTT CAATGAGAAG CAAAATCATA      60
TCCAAATCAA AGTAAAGGTC ATCGGTGGCC AATGAAGAGC GGAGAAAACG GAGGCGGGAG      120
AACAGACGCG ACCTCAAGAC AGAAGAATGG AAGACGCAAC TTTCAAGAAA AGAGGAACTG      180
AAACGAAAAG AGAGGCACAG TCCAAATGAG GAAGAGAACA AGGAGCCTTC AGTCTCCTGG      240
GGGCCAGGGA GCCTCGCCAC GCGGTCACAG GTACACGGGG ACATTTAGAG GCCATCTCCT      300
TTAAAGCCAG ACATTCTTCT TACTGGAATC TAGGCCATGA AG                                     342
```

(2) INFORMATION FOR SEQ ID NO:245:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 373 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

GAATTCGGCC	TTCATGGCCT	AGGCGGGTGA	CATTCAGCCG	GCGGTTCTGGG	GGGACGGANT	60
CTCCATTCCA	GAACCATGGC	CCAATTTGTC	CGTAACCTTG	TGGAGAAGAC	CCCGGCGCTG	120
GTGAACGCTG	CTGTGACTTA	CTCGAAGCCT	CGATTGGCCA	CATTTTGGTA	CTACGCCAAG	180
GTTGAGCTGG	TTCCTCCCAC	CCCTGCTGAG	ATCCCTAGAG	CTATTCAGAG	CCTGAAAAAA	240
ATAGTCAATA	GTGCTCAGAC	TGGTAGCTTC	AAACAGCTCA	CAGTTAAGGA	AGCTGTGCTG	300
AATGGTTTGG	TGGCCACTGA	GGTGTGTATG	TGGTTTTATG	TCGGAGAGAT	TATAGGCAGG	360
CGGGTCACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC	TTCATGGCCT	AAACAGGACC	TGCTTCACAC	CACCAAGCAT	CAGGATGTGT	60
TGCTCAGTGA	GCAGACCCGA	CTCCAGAAGG	ACATCAGTGA	ATGGGCAAAT	AGGTTTGAAG	120
ACTGTCAGAA	AGNAGAGGAG	ACAAAACAAC	AACAACCTCA	AGTGCTTCAG	AATGAGATTG	180
AAGAAAACAA	GCTCAAACTA	GTCCAACAAG	GAAATGATGT	TTCAGAGACT	CCAGAAAGAG	240
AGAGAAAGTG	AAGAAAGCAA	ATTAGAAACC	AGTAAAGTGA	CACTGAAGGA	GCAACAGCAC	300
CAGCTGGAAA	AGGAATTAAC	AGACCAGAAA	AGCAAACCTG	ACCAAGTGCT	CTNCAAAGGT	360
GCTGGCAGCT	GAAGAGCGTG	TTAGGACTCT	GCAGGAAGAG	GAGAGGTGGT	GTGAGAGCCT	420
GGAGAAGACA	CTCTCCCAAA	CTAAACGGCA	GCTTTCAGAA	AGGGAGCAGC	AATTGGTGGA	480
GAAATCAGGT	GAGCTGTTGG	CCCTCACGCT	CGAG			514

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCC	TTCTGGCCTA	GGACTCTATA	GAACCCACTG	CCTCCTGATG	AAGTCCCTAC	60
TGTTCAACCT	TGCAGTTTTT	ATGCTCCTGG	CCCAATTGGT	CTCAGGTAAT	TGGTATGTGA	120
AAAAGTGTCT	AAACGACGTT	GGAATTTGCA	AGAAGAAGTG	CAAACCTGAA	GAGATGCATG	180
TAAAGAATGG	TTGGGCAATG	TGCGGCAAAC	AAAGGGACTG	CTGTGTTCCA	GCTGACAGAC	240
GTGCTAATTA	TCCTGTTTTT	TGTGTCCAGA	CAAAGACTAC	AAGAATTTCA	ACAGTAACAG	300
CAACAACAGC	AACAACAAC	TTGATGATGA	CTACTGCTTC	GATGTCTTCG	ATGGCTCCTA	360
CCCGTTTCTC	CCACTGGTTG	AACATTCCAG	CCTCTGTCTC	CTGCTCTAGG	ATCCCCACGC	420
TCGAG						425

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGAA	AGAAGAAAAA	GGGCCAAAAG	CCAAAATGAA	60
ACTGATGGTA	CTTGTTTTCA	CCATTGGGCT	AACTTTGCTG	CTAGGAGTTC	AAGCCATGCC	120
TGCAAATCGC	CTCTCTTGCT	ACAGAAAGAT	ACTAAAAGAT	CACAACTGTC	ACAACCTTCC	180
GGAAGGAGTA	GCTGACCTGA	CACAGATTGA	TGTCAATGTC	CAGGATCATT	TCTGGGATGG	240
GAAGGGATGT	GAGATGATCT	GTTACTGCAA	CTTCAGCGAA	TTGCTCTGCT	GCCCCAAAAGA	300
CGTTTTCTTT	GGACCAAAGA	TCTCTTTCGT	GATTCCTTGC	AACAATCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:249:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

GAATTCGGCC	TTCATGGCCT	ACACAATGGT	GTTCGCATT	TGGAAGGTCT	TTCTGATCCT	60
AAGCTGCCTT	GCAGGTCAGG	TTAGTGTGGT	GCAAGTGACC	ATCCCAGACG	GTTTCGTGAA	120
CGTGACTGTT	GGATCTAATG	TCACTCTCAT	CTGCATCTAC	ACCACCACTG	TGGCCTCCCG	180
AGAACAGCTT	TCCATCCAGT	GGTCTTCTT	CCATAAGAAG	GAGATGGAGC	CAATTTCTAT	240
TTACTTTTCT	CAAGGTGGAC	AAGCTGTAGC	CATCGGGCAA	TTTAAAGATC	GAATTACAGG	300
GTCCAACGAT	CCAGGTAATG	CATCTATCAC	TATCTCGCAT	ATGCAGCCAG	CAGACAGTGG	360
AATTTACATC	TGCGATGTTA	ACAACCCCCC	AAGACTCGAG			400

(2) INFORMATION FOR SEQ ID NO:250:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

GAATTCGGCC	AAAGAGGCCT	AAGAGATTCA	GGACCTGCAG	AGTCGCCAGA	AGCATGAAAT	60
TGAATCTTTG	TATACTAAAC	TGGGCAAGGT	TCCCCCTGCT	GTCATTATTC	CCCCAGCTGC	120
TCCTCTGTCTG	GGGAGAAGAA	GGAGACCCAC	TAAAAGCAAA	GGCAGCAAGT	CTAGTCGCAG	180
CAGCTCATTG	GGCAATAAAA	GCCCCACAGCT	TTCAGGCAAC	CTGTCTGGTC	AGAGTGGAAC	240
TTCACTCTTA	CACCCCCAAC	AGACCTCCA	CAGTCGAG			278

(2) INFORMATION FOR SEQ ID NO:251:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 187 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```
GAATTCGGCC TTCATGGCCT AGTTTATATA CTTTCTCTGA AGGATCCTAA TGATAGTTAA      60
CCATTTCTCA TTTTATTTT GCTGGATTGT TTTCTGTTTT TTGCTTCAGC ATTCTTGCTT      120
TTGCTGTGCT TACTTTTGA GTTTGTATTC CCTGTGTCAC TGTTTTCTTT CGCATCCACC      180
ACTCGAG                                           187
```

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```
GAATTCGGCC TTCATGGCCT ACTTCTCTGG AAAGGTCACT GATTGTTTGT TTTTTCGAGA      60
CAGGGTCTCG CTCTTCACCC AGACTGCAAT GCAGTGGCAC AATCATAGCT TATTGCAACC      120
TCAAACCTCGT GGGCTCAAGC AATGCTCGCT CCTCCCAAGT AGCTAGGACC ACAGGCATGC      180
ACCACGATGC CCACCTAGTT TTTTGTATTT TCTATAGAGA NGGGGGTCTC ACTGTGTTTC      240
TCAAGCTGGT CACATACTCT TGGCCTCAGG CAGTTCTCCC ACATCAGANT CTCAAAGCAC      300
TGGGCTTACA GCTGNGAGCC NGNCCTTTT AAAAAAAAAA AAAAAATCAA AACAAAACAA      360
AACAAAGATTA TGTCTTTCCC ACGCATCTCG AG                                           392
```

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```
GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTCA TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAGTAA ACAATGAGAA      180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG                                           320
```

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

GAATTCGGCC	TTCATGGCCT	AATCAGAAGC	TTTTCAAAAT	TCCGTCTTCA	AGAAGAAACA	60
CCCGTGGAGG	AAGAAGACAT	TATACAAAAC	AAATTTAGAA	ACTGGGATCA	TGAGTGGAAA	120
AACAAAGGCA	AGAAGGGCTG	CCATGTTTTT	TAGACGTTGC	TCTGAAGACG	CCAGCGGTAG	180
CGCCAGTGGC	AATGCTTTGT	TATCAGAGGA	CGAAAACTCT	GATGCGAATG	GGGTAACCTG	240
ATCATGGAAG	ATTATTCTAA	GTACAATGCT	TACACTGACT	TTTCTTCTTG	TAGGACTCCT	300
AAATCATCAG	TGGCTTAAAG	AAACAGATGT	TCCTCAGAAA	TCCAGACAAT	TATATGCCAT	360
GCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

GAATTCGGCC	TTCATGGCCT	AAAGTAGTTC	TGTTATAAAA	AGCCAGGAAT	CCTAAAACCA	60
AAATATTAGA	ACGAAAACAG	AAACATGGCT	CACTATATTA	CATTTCTCTG	CATGGTTTTG	120
GTGCTGCTTC	TTCAGAATTC	TGTGTTAGCT	GAAGATGGGG	AAGTAAGATC	AAGTTGTCGT	180
ACTGCTCCGA	CAGATTTAGT	TTTCATCTTA	GATGGCTCTA	ATTGTGTTGG	CCCAGAAAAC	240
TTTGAAATAG	TGAAAAAGTG	GCTTGTCAAT	ATCACAAAAA	ACTTTGACAT	AGGGCCGAAG	300
TTTATTCAAG	TTGGAGTGGT	TCAATATAGT	GACTACCCTG	TGCTGGAGAT	TCCTCTCGGA	360
AGCTATGATT	CAGGAGAACA	TTTGACGGCA	GCAGTGAAT	CCATACTCTA	CTTAGGAGGA	420
AACACAAAGA	CAGGGAAGAA	CCTCGAG				447

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

GAATTCGGCC	TTCATGGCCT	AAATGAAGCA	AAATTCATA	CATCATTTTG	AAAATAGTGT	60
TTCTTTCCCT	GATAGGCCTG	TTCTGCATCA	TTCTTTTAGC	TTCTTCTGCT	CCTGTTTATC	120
ACTTGGTCCC	ACTTTTATAT	TTTCTCTCTT	CGGTCCAGAA	TTTCTTATTT	AGTTTCTTGT	180
ATTTTGCCTA	CTCCCTCCCT	TCTCCATGAT	TCAGCCTAGT	CTTTCCTGCC	TCTGTGGACT	240
TGGGTGTGCC	TTCTCTGGG	CCACCTCGTC	TTTTGCTGCT	GTTAGCCCTC	CCGCCTGCGC	300
ACCTGCCACT	TCACCCTCGC	CTGTGGTCCA	CTTACGTTCC	ACTCAGCCCC	GTCAGTCCTG	360
CTTTGTTCTT	CTCCACCGCC	TAGGTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAATTTAAGT TCCAGTATGA GATCTTCAAA GCTGTCTTTT TTTTCTTC TTCCGTTCTC 60
AGATCCTGAG 70
```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```
GAATTCGGCC AAAGAGGCCT AGTCAAATTC TTACCTCGCT CTTTCACTGC TAGTAAGATC 60
AGATTGCGTT TCTTTCAGTT ACTCTTCAAT CGCCAGTTTC TTGATCTGCT TCTAAAAGAA 120
GAAGTAGAGA AGATAAATCC TGTCTTCAAT ACCTGGAAGG AAAAACAAAA TAACCTCAAC 180
TCCGTTTTGA AAAAAACATT CCAAGAACTT TCATCAGAGA TTTTACTTAG ATGATTTACA 240
CAATGAAGAA AGTACATGCA CTTTGGGCTT CTGTATGCCT GCTGCTTAAT CTTGCCCTG 300
CCCCTCTTAA TGCTGATTCT GAGGAAGATG AAGAACACAC AATTATCACA GATACACTCG 360
AG 362
```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```
GAATTCTAGA CCTGCCTCGA GTGCGGATCC AGCCGGAGGC GAAGAGAAGC ACTTTGGGGG 60
CAAAAGAAGA GAAAAATGAA GACGGGACAT TTTGAAATAG TCACCATGCT GCTGGCAACC 120
ATGATTCTAG TGGACATTTT CCAGGTGAAG GCTGAAGTGT TAGACATGGC AGATAATGCA 180
TTTGATGATG AATACCTGAA ATGTACGGAC AGGATGGAAA TTAAATACGT TCCCCAACTG 240
CTAAAGGAGG AAAAAGCAAG CCACCAGCAA TTAGATACTG TGTGGGAAAA TGCAAAAGCC 300
AAATGGGCAG CCCGAAAGAC TCAAATCTTT CTCCCTATGA ATTTTAAGGA TAACCATGGA 360
ATAGCCCTGA TGGCATATAT TTCCGAAGCT CAAGAGCAAA CTCCCTTTTA CCATCTCTTC 420
AGTGAAGCTG TGAAGATGGC TGGCCAATC GAG 453
```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC TTATGGCCTA CTTTAAAAAA AAACCAATAC CAAAGAAGCC TACAATGTTG      60
GCCTTAGCCA AAATTCTGTT GATTTCAACG TTGTTTTATT CACTTCTATC GGGGAGCCAT      120
GGAAAAGAAA ATCAAGACAT AAACACAACA CAGAACATNG CAGAAGTTTT TAAAAAATATG      180
GAAAATAAAC CTATTTCTTT GGAAAGTGAA GCAAACCTAA ACTCAGATAA AGAAAATATA      240
ACCACTCAA ATCTCAAGGC GAGTCATTCC CCTCCTTTGA ATCTACCCAA CAACAGCCAC      300
GGAATAACAG ATTTCTCCAG TAACTCATCA GCAGAGCATT CTTTGGGCAG TCTAAAACCC      360
ACATCTACCA TTTCCACAAG CCCTCCCTTG ATCCATAGCT TTGTTTCTAA AGTGCCTTGG      420
AATGCACCTA TAGCAGATGA AGATCTTTTG CCCATCTCCC TCGAG                        465

```

(2) INFORMATION FOR SEQ ID NO:261:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```

GAATTCGGCC TTCATGGCCT AGCGGCGGGG CGAGCGCCTC CACGCAGCAA CTCCGGAGTC      60
CCCCGCTTGC CCGAGCGCAG TTTCTCCGCT GCTGTTTCCA CCGGCTTTGT AACACTGGGA      120
ATTTACATCC TCACCCGCAC CCCTCACGCC CGAGGATTTT AAATCACCCT TTAATCTCGA      180
ACTGAGAGTT GCGGTAGATG GGATTTTTGC CTTTTCCCA GATGGTTGAA GGTTAAGATT      240
TTTGAAACC CCCCCACCTC CTTATTTCTA TTATTATTC TGCNAGAAAA GTATAAGAG      300
AGTTGTAGTG GAGGTGAGAT TTGTGATCGG GAAAGCCTTC GACTCCCTCC TTCTCCGTCT      360
TCCGCTTCTC TCTCTCTGAT TAGTTCCTAT CCAGCAGCAG ATTGAAGCAG GAGATGATTC      420
TTCTCAAGGT TTGTTAGCA GCTTCACTTC TAGGCGAAGG CTTATGAAC CAAGTGACGA      480
ACAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:262:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```

GAATTCGGCC TTCATGGCCT ACATTTTCT ATTGATATAA AAATTGTTAG AGAAATATAC      60
AGTTGTATAT TTCCCCCTT TATACAGAAA TTTTACAATA ATTCAGATT TTTCTGAGTT      120
TTTTAGATT TTTGATTCTA TAATATGAGA TTATCTTTC TTCTCTTAT TTTTATAGGT      180
TATTTATTTT TTCTTTTCTT TTTAATTGTC TCATACAGGT TTAATCTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:263:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

GAATTCGGCC	TTCATGGCCT	AGTAAAATTT	AAAATACATA	CTAACATATA	ACCCAATTTT	60
AACATATTAA	GTGAATATGT	ATTCTTAAAA	GATCCACTAC	TTTACATTTA	GATGCGTTAG	120
GATGTATTAG	AAATAAAAAC	AGAAGAAAAG	ATTTAGAATC	TAGTCTGTCT	TTGCCACTCA	180
AGCTAGTTAC	CCTCTCTGAG	TTTATACCC	CCTTCATCTA	TTAAAATGGG	GGGTAACGCC	240
AACCTGACTC	CTTTAAAATG	AGTTTGAGAG	TCAGGCAAAT	TAGAAAAGATA	CATAGATGAA	300
AACCTTTTAA	AAAGTATATA	GTCTTTCATG	ATTGTAGAA	CACCTTTTATA	CTTTTCAGAG	360
TACTTTTACA	TTGATCATAT	TGTTTGTAAT	TTATGAAAGT	CTTCTACAAA	TCAGAATTAT	420
GCTTATTATA	CAGATGTGGC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

GAATTCGGCC	AAAGAGGCCT	AATTACTTTA	TATTTTAAAA	GCTCTGTGAC	TTCAGTAGTG	60
CATTGAAATA	AAATTTTAT	TCATTATGAG	AGAGTCTGTG	AGGAACAGAA	TCATGGTTCC	120
TGTGTGTTTG	AAGATATGGC	GTGGGGTGAT	AGTGCTGGCA	GCAGCTCTGT	TGCTCTGTG	180
CCCATGGCAT	ACAGACTGGA	TCTGCTGGTC	CACGGCTCCT	GAGGTTAATG	TCCAAGCCCT	240
CTGCAATGCT	GACAGTCTTC	CTCATCCTCA	CACCCTACCT	CTCAGTTTCT	ACCTGCCACC	300
TCCCCAGTAA	TATTAGCCTC	TTGAGTCCCC	AACAACACTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

GAATTCGGCC	AAAGAGGCCT	ATTAAAATTC	ATTATCAGT	AGGATCATTC	TGTTCTAGAC	60
AAGTTGGCTA	TATTATAAAA	CATTAAGCAA	GCAGGCACTA	AGTTAAATAT	TGTAGCAGTT	120
GAAATTTAAT	GCTAATCTTA	CAGTTTTACA	CAGTTAACAA	TCTAGGCCAA	ATCTATTGAT	180
ACCTTTGGAA	CTACCCTTTA	AATTCCATCC	TATGCTTGTC	AAAAGGTTGC	ATATAATTTT	240
TTTTCCCTTT	TCTCTCTTCT	CTTCCTCTTC	TTTTTCTTT	TTCTTTTCT	ATTTCCCTTT	300
TCTTCCTTTT	TCTTTCACAG	AGTCTTGGA	TATCACCCAC	ACTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

GAATTCGGCC	AAAGAGGCCT	AGAATAAAAA	TGCTTGTGTC	AAAAATTCAA	ACATTTGTCT	60
CTTTCCTTTC	CATTCCAGTT	CTAGGTCTCG	TTCCAGATCA	TATTCTCCAG	CTCATAACAG	120
AGAAAGAAAC	CACCCAAGAG	TATATCAGAA	TCGGGATTTC	CGAGGTCACA	ACAGAGGCTA	180
TAGAAGGCC	TATTATTTCC	GTGGGCGTAA	CAGAGGCTTT	TATCCATGGG	GCCAATATAA	240
CCGAGGAGGC	TATGGAACT	ACCGCTCAA	TTGGCAGAAT	TACCGCAAG	CATACAGTCC	300
TCGTCGAGGC	CGTTCAAGAT	CCCGGCTCCC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:267:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

GAATTCGGCC	AAAGAGGCCT	AGTGGAAATT	TGTGGCTAGT	GTGATTTTGT	TTTGTTCCT	60
TTTAAGTACT	GTTGATCAGT	TGTGACACTT	ACTGGTTAAA	CTTACGTTGC	TAAAGATTTC	120
TCTATAATAA	GCCACACATT	ATATTTAGAC	TATATTAAGG	GACCTTGGTT	TTCTTCTAGA	180
TAGCAGCTGT	CCCAAAGAAA	ATATTTCTTC	TTGTCTGT	AAGATTTAGC	TATTATCTGC	240
CAGTTGTAA	GAGGTTTGG	TTCCAACTC	AACCAGCAAT	GTTGAGAGCT	GAACCTAAGA	300
TAGCTGTGT	ACTTTTGTCT	TTCCATCTGT	TACTGTCCTT	CATTCTTGGC	TCCCTACTAT	360
CTATAACAG	CAAGCTCGAG					380

(2) INFORMATION FOR SEQ ID NO:268:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

GAATTCGGCC	AAAGAGGCCT	ATCTAGACCT	GCCTCGAGTC	AGCAACAACA	ATTTTAAAA	60
TTTCTTTCTG	GATTCTAGAG	TGAGTTTTTT	TCATAACACA	AGAGGATAAG	AGTGAGGACA	120
ACAGGAGGTA	TTGATGATCT	GCTGAGCACC	AGGCATTATG	CTAAGTGCA	TCACACACAT	180
CTCAGTGCCT	ATTGCCTCGT	TGTGGACTTC	TCTATCCAG	CTCGTCCCC	TGGCAAATTC	240
TTTCTCATCC	TTCAACTCTC	AGACACCTCC	CCCGCGCCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 157 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

GAATTCGGCC	AAAGAGGCCT	AACCAGGCAT	TTTTCATTAG	GGTTCTAGGT	CCAGGTGAAT	60
TCTTGAGTTG	GTTGTTGTG	TCATGTATTG	GCCTTAATA	ATGCTCTTAT	TTTGGCCCCAC	120

GCCTGTGGTC CCAGCACTTT GGGAGGCTGG TCTCGAG

157

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 157 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GAATTCGGCC AAAGAGGCCT AACCAGGCAT TTTTCATTAG GGTTCAGGT CCAGGTGAAT 60
TCTTGAGTTG GTTCGTTGTG TCATGTATTG GCCTTTAATA ATGCTCTTAT TTTGGCCAC 120
GCCTGTGGTC CCAGCACTTT GGGAGGCTGG TCTCGAG 157

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GAATTCGGCC AAAGAGGCCT ACCCAAATAA AATCAGAGTC AGAAATGGAA ACAGACAGTG 60
GAGTACCTCA AAACACTGGA ATGAAAAATG AAAAAACAGC CAACAGGGAA GAGTGTGCA 120
CCCAGGAGAA AGTTAATGCA ACAGGACCAC AGTTCGTGAG TGGAGTGATT GTGAAGATCA 180
TTAGCACAGA GCCTCTACCT GGCAGGAAAC AAGTCCGGGA TACTTTGGCA GCAATCTCAG 240
AAGTTCTTTA TGTTGATTTG CTAGAAGGGG ATACAGAAATG CCATGCTAGA TTTAAACTC 300
CTGAGGATGC TCAAGCAGTA ATAAATGCCT ATACAGAAAT TAACAAGAAA CACTGCTGGA 360
AACTCGAG 368

(2) INFORMATION FOR SEQ ID NO:272:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

GAATTCGGCC AAAGAGGCCT ACAACGAACG GCTTGGGNGC GGACTGGTAT CCGGGGACTG 60
TGACTTGCGAG GGTCCGCCAT GGAGCCAGAG CAGATGCTGG AGGGACAAAC GCAGGTTGCA 120
GAAAATCCTC ACTCTGAGTA CGGTCTCACA GACAACGTTG AGAGAATAGT AGAAAATGAG 180
AAGATTAATG CAGAAAAGTC ATCAAAGCAG ANGGTAGATC TCCAGTCTTT GCCAACTCGT 240
GCCTACCTGG ATCAGACACT TGTGCCTATC TNATNACAGG GACTTGCTGT GCTTGCCAAG 300
GANAGACCAC CACATCCCAT TGAATTTCTA GCATCTTATC TTTTAAAAAA CAAGGCACAG 360
ACTCGAG 367

(2) INFORMATION FOR SEQ ID NO:273:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTTGGGT CCTAGGATAT AAATATTTT CCCTTTATAA GATATTTATA GGATATTGCA	60
AACAATTTCT GTTTTTCAT ATCCTTGCCA GCAGTTAGGG TTATCAAATT CTTTGATTTC	120
TTACTGATTT GTAAGTTTT TTGTTTGT TTAGGTATT TCAGGATAGT TACAAATGTT	180
AGGAAACTT ATTTTATTT GGCTTTTGAA GTTCCAGAT TTCTTGAACA GTGACCAATA	240
TGGACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:274:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 133 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCGGCC AAAGAGGCCT ATCTTTTTTC CTCTTTTTTT GTTGCAGAAA TGATAACCTA	60
CTATTCACCTA TTCTGTGCCT TGCTTTGTTT GCATACTGAA AATTATCCAT GGAAGGATAC	120
AGCACCACTC GAG	133

(2) INFORMATION FOR SEQ ID NO:275:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCGGCC AAAGAGGCCT AATGAAACAT TTCTGTAACC TGCTTTGTAT CTTGATGTTT	60
TGTAATCAGC AAAGTGTATG TGACCCGCCT TCACAAAATA ATGCAGCAAA TATTTCCATG	120
GTTCAAGCTG CTTCAGCAGG ACCCCCATCT CTGAGAAAAG ATTCGACTCC AGTTATAGCC	180
AATGTAGTAT CATTGGCAAG TGCCCCTGCT GCTCAGCCTA CAGTGAATTC TAACAGTGTC	240
TTACAAGGTG CAGTTCCAAC AGTAACAGCG AAAATCATCG GTGATGCAAG TACTCAAACA	300
GATGCCCTGA AACTGCCACC TTCCCAACCT CCAAGGCTTT TGAAGAACAA AGCTTTATTA	360
TGCAAACCCA TCACACAGAC TAAAGCCACA CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:276:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

```

GAATTCGGCC AAAGAGGCCT ACCCCTCCCC ATTTCTAGTT TCATGAACTG TGCACAGGGA    60
TATGGGGCTG TTCGAGGTAC TTTTGGGCTG ACCAAGGCTC AGAGGCTACT GACAGCTTTG    120
CTGCAAGTAA CTTCTAGGCC TTGTGGGTCC CAGTGCAGGG AACCCATGTG CCGTGACACT    180
GGAGAAGCCA TCTGATCCAG GTCTCTCACT TGACAGATGG GGAAACTGAG GTCCAAAGAG    240
GTACAGCAGC TTGGTTTAAG AGATAGAGAT GGAAGTGGAA CAAAAATAAT AACCATTGTA    300
TAATATTTTA ACATTTATTG ATTTGTTTTT ATATGCCAAG ACCTTTTAAA GCATTATCTC    360
CTTTAAACTC TCATAACCAC TCTTACTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```

GAATTCGGCC AAAGAGGCCT ACTGCTTCCT GATCATTTGT CTTTTTAAAT AAAAATATGA    60
TATTTGAGAT TCTTTTATTC TCTTTAAATA TTTGAATACA GAGTCTATTT GAAGGACCAG    120
TATATTGAAT AGCAGTAATA TTTGAAGGAC TAGTCAGCTG TAGAAGCCTT GACTTCAGAT    180
CTTCACCCAA GAAACTCTGT GTATTTGCTT TTCCTGGGCC ACTCAGATAG ACAATTGTGT    240
TTTNGATACA GTAAGAGTTT GCAGCTTAGC TTAAGTAGAA ATAATCCGGA TGCCTCGAG    299

```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```

GAATTCGGCC AAAGAGGCCT ACTAGGATTT GAGGAGGACG CCTCTTTTGC AGGAGGATGC    60
AGTGAACAGC CAAAGTCATC TGACATCCTT TTCCATCTTT TTCCTTCTAG TATCCCAGTT    120
TCAAGGCCCA GGAAAGGCAG GGAATAACAT ATGGAGCAGT TACCCAGAGG TTCAAAGGGT    180
TAATCTCTAA GAATTCATTC TCTGACACCA GCCACAGCTC TTGTCCCATC CTCTGGGACC    240
GTCCCCTCTG AGCCCCAGGT TGGCAGCTTC CCTGAATTCC TTCTATGATA TAATTTGTAA    300
TTCGGCAGGG CTCTGGGACC CAGGCTCAGA GACCCAGGCT CTGCTCTCTC CTCAGTTTCC    360
AGGAGTCAGG GCTTGCTCTA AGGGAGGAAG TAAACAGGCC TTTCCCTTGC TCCCTCTCCT    420
TTTCCTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

```
GAATTCGGCC AAAGAGGCCT AGTGGGAGTT AGATGTATTA TATAAAAATG TCCCCAGCAT      60
CAAAATGACT CAGAGTATGA CTGTATTTTT AAATTAAATA TCAAGACCTA TCATCTGACA      120
AAACATATGA ATGACAATGA GATATAATAT TTGAAATTAG ATCCGTTCTG GGAATCAAA      180
GATATTTTGT AACAGTATAC ACAGTAGGCA TTGGTAAGTA AATGAGAACT CTATGAGCTG      240
TTTTCTGGAA AAGTTTAAAA TGAAATTTGT CAAATATCAA ATGATTGTTA TAAGAAAATC      300
AGTGGAGGCA GTATCCTTGG AAAAATCCAG AACAGTTTT GTNTGTTTGT TGTTTTTTAC      360
ATCAAGGCAG ATCAGCAGGT GAACAGCTCG AG                                     392
```

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```
GAATTCGGCC AAAGAGGCCT AGAAGAACT TTTTCTTGGG AGCAAGGTAG TTATTTCAAA      60
GCACAGAAAA AGGCGGCGGG GGCACAGAG AAGCACAGAG AAGCGGGGCG AGTTGCTCAG      120
GTAAACATT CATCTTGGCT TTTCTTTTAA AAAGATAAAC TTTGTCCAC GTAAAGAGGA      180
AACTGCATA GATATTCATT GAGATTATCT GATTGTCCAC TGTTGCCAAA GAAAAACAA      240
AGGTAAATA CACGAGTTTC TGCAATCAGA AGAAAGTATT TCAGGTAAAA ATTAAGTATT      300
AAGCAACTTT TCTCAGCAGA AGAAATGCCC AAATTCTTAA GGACAGTACT CGAG          354
```

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```
GAATTCGGCC AAAGAGGCCT ACTTTGAGAT TTTTTTGTTG TTGTTTCCTT TTTGTATTTT      60
ACTGATATCA CCAGGATAGT TTAATCTCCT TCTAGCTTTC TGCTTACCGC AACTGGATG      120
ACACACACAT ACACACCCGC AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG      180
GTCCCCCACC CTCCCCTCCT CGTCCTACTT CTCCTCTTGA CAGCGAGGAC AGGAGGGGGA      240
CAAGGGGACA CCTGGGCAGA CCCGCCGGT CTCCCCCAC CCCACCCGGC CCTCANATCA      300
TACTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GAATTCGGCC	AAAGAGGCCT	AGACCTGCCT	TGTGTTTTCC	ACCCTGAAAG	AATGTTGTGG	60
CTGCTCTTTT	TTCTGGTGAC	TGCCATTTCAT	GCTGAACTCT	GTCAACCAGG	TGCAGAAAAT	120
GCTTTTAAAG	TGAGACTTAG	TATCAGAACA	GCTCTGGGAG	ATAAAGCATA	TGCCTGGGAT	180
ACCAATGAAG	AATACCTCTT	CAAAGCGATG	GTAGCTTTCT	CCATGAGAAA	AGTTCCCAAC	240
AGAGAAGCAA	CAGAAATTC	CCATGTCCTA	CTTTGCAATG	TAACCCAGAG	GGTATCATTC	300
TGGTTTGTGG	TTACAGACCC	TTCANAAAAT	CACACCCTTC	CTGCTGTTGA	GGTGCAATCA	360
GCCATAAGAA	TGAACAAGAA	CCGGATCAAC	AATGCCTTCT	TTGTAAANGA	CCAAACTCTG	420
GAATTTTAN	AAATCCCTTC	CACACTTGCA	CCACATCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

GAATTCGGCC	AAAGAGGCCT	AGCAGATTCT	TAATTTCCCT	GTCCATATTT	TCCCCTTTCC	60
TTTCTCCCTG	CCCGTTCCAT	GGTCTTATCT	GGCTGCTTTC	TCAATTTATT	CTTGGTTGCT	120
TGTGGATTCC	CTTCTATTAA	TCTGAAGTC	GTTACTGACA	TGTTTGGCC	TATACCAGCT	180
AGACCATTGC	CTGAAGACTT	TTGATGAAC	AATCTGTGTA	AAGAAAAGG	GAATCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

GAATTCGGCC	AAAGAGGCNT	ACCAGGANTT	TCTATTCAAT	TGAGAAGAAC	CCAGCAAAAT	60
GGGGATCTCC	ACAGTCATCC	TTGAAATGTG	TCTTTTATGG	GGACAAGTTC	TATCTACAGG	120
TGGGTGGATC	CCAAGGACTA	CAGACTACGC	TTCATGATT	CCCTCGGAGG	TGCCCTTGGA	180
TACAACTGTA	GCAGAAGGTT	CTCCATTTC	CTCGGAGTTG	ACCCTGGAGT	CAACTGTAGC	240
AGAAGGTTCT	CCGATTTCT	TGGAGTCAAC	CCTGGAGTCA	ACTGTAGCAG	AAGGTTCTCT	300
GATTCCTCA	GAGTCAACCC	TGGAGTCAAC	TGTAGCAGAA	GGACTCGAG		349

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

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GAATTCGGCC AAAGAGGCCT AAAAAAATAA GAAATAATCT ATTCCACATT TAATAATTTG      60
AATCTTCTCG CTATAGATAT TTGGTTATCT TGACTTTTTA ANATAACATA TTTCTACAGG      120
ATTTTGAGTC TGAGAAGAGA AAGGTAANAT GCAAGACACT TCGATTTGTT GCACATTATT      180
ATGGAGCATC ATTAATGGTT TGNACATTTT TTGTCCTTTG GGCTTGAATG GACAGTACCA      240
AATTGGGGGT AATCAGCAAC TTGATGCACA GCTACGAGGA ATAAATGCTT TTGCTAATGC      300
ACTCGAG                                           307

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(2) INFORMATION FOR SEQ ID NO:286:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

```

GAATTCGGCC AAAGAGGCCT AAAAGATTAA AAAAAAATTT GTGTGATTG ACTATATATT      60
AAAATCTCTT TCATAATTAG TCAACAATTT AAGCAACAAT TAAATTATTA GTGCTGTGGA      120
AAATATAGAA GAAAGATAAT TTCTTATTCC CCTCCTGAGG AAAGCATTTG ATACACCTGG      180
AAAGGAGCTG CTATGAAGCC AATTTATCTG TTCTTTTAT CAATTCAGCA GCATTTAAGA      240
TCAGATTTT TCTCTAGTGG TCCAGCAGAG GGAGCCCTAG CACATGAATT GTTTTCATT      300
CGTGCTTGCA CCCAGGATCT CGAG                                           324

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(2) INFORMATION FOR SEQ ID NO:287:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

```

GAATTCGGCC AAAGAGGCCT AAGAGAGATC AGTAAAACCA CTGGNAAAGA AAAGATGGAG      60
AAAATGTTGG AAAACCAGAA CTGTNTGCTG TCAAGNTCAT GTGGAATGTT CAAGAAAGAA      120
TCTGACTCTA TTATCTAATA TCTTACATAC NTCCACCAGA CTGGACTTGC TATTTGAATT      180
TTAAGCAAGT TTCCTTTCCT TTTATACAAA TTGCAAATTT CATATTTTAA TAATCACATC      240
CTAGGAATAG CACAATAATT GGGAAATAGA ACCCTTATCA CTAGNAGAAC CATTTTCCTG      300
CCTCTCTCGA G                                           311

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(2) INFORMATION FOR SEQ ID NO:288:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

```

GAATTCGGCC AAAGAGGCCT ATGCCCCATA AAAGGGCTCC TGAAGCTCTT TGTGAAGGGG      60
TCTGAAAAGG GCAGATGAGG GTGTCCTTTG GGGCGGATGT GGGGTTTGGG ACAATTGCAT      120

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GTGATTGTCA TTCTTTAGCT GTCTGCATCC CACAGAACT TTTTCTGAG TCTTCCAGCT	180
GGCCCAAGTC CTGGGTCTCT TTTACTGTTT TTGTAGCTGA CTACAGTAGG CAGATGAGGA	240
ACTCTTAGTC AATCTGGAAA AACTCGACTG ACTATAAACA ATCCTAAATT GAAAGAAAGG	300
TCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:289:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GAATTCGGCC AAAGAGGCCT AGCCGGTGTG GGGAGGATTG GCTCAGCCAC CCGCTGGGAA	60
TCGTGCAGGG ATTCTTCGCC CAAAATGGAG TTAATCCTGA CTGGGAGAAG AAAGTAATTG	120
AGTATTTTAA GGAAAAGCTG AAGGAAAATA ATGCTCCTAA GTGGGTACCA TCACTGAACG	180
AAGTTCCCCT TCATTATTTG AAACCTAATA GTTTTGTGAA ATTTTCGTTGC ATGATTCAGG	240
ATATGTTTGA CCCTGAGTTT TACATGGGAG TTTATGAAAC GGTTAACCAC AACACAAAAG	300
CACATGTTCT TCATTTTGGG AAATATAGAG ATGTAGCAGA GTGTGGGCCT CAACAAGAAC	360
TTGATTTTAA CTCTCCACGA AATACCACTT TGGAAAGACA GACTTCTTAT TGTGTTCCGG	420
TGCCTGGGGA ATCTACGTGG GTAAAAGAAG CCTATGTTAA TGCAAACCAA GCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:290:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 318 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC AAAGAGGCCT AAAAAAATCT TCTGGAATA ATTCTTAGCT GTGTAAGAAA	60
TTTGATACTT AAGGAGACAG CAGTGGAGTC ACTTAACTAA TTTGTGTTGG TTTTGTACCT	120
GCATAGTGAC TGCCATTTAC TTTTATGTTT TGGTCAATTA GATACTAAGT AAAAAGATAG	180
TTGGTATTTT GGCTTCAGAT CAGGTCTATT TCTCCAACCT CTATATATCC TTTCTGTGAT	240
TAAAACAAAT AAACAATCCT CAGTATCATC ATTTAACACC TCTAACTGAT AGAAAAAATG	300
AGGTTGTGGG TCCTCGAG	318

(2) INFORMATION FOR SEQ ID NO:291:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 213 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAATTCGGCC AAAGAGGCCT AACCTTGGGA TTTTCTATAT ATATGATGGT CTCATTTGTG	60
NATAAACACA ATTTTATTTT TTCCTTTCCA ATCTGGATGC TTTTTTTTTT TNCCTATTGC	120

ACTGCCTATT GCATTCTTAA AAACCTCCATT CCAATGTTCA ATAGAAATGG TGAAAGTGA 180
CATTGGAATG GAGTTTTTAG GAATGCACTC GAG 213

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAATTCGGCC AAAGAGGCCT AAAAAGAATT AACCAGCTCT TCAGTCAAGC AAATCCTCTA 60
CTCACCATGC TTCCTCCTGC CATTCAATTC TATCTCCTTC CCCTTGCAATG CATCCTAATG 120
AAAAGCTGTT TGGCTTTTAA AAATGATGCC ACAGAAATCC TTTATTACA TGTGGTTAAA 180
CCTGTTCCAG CACACCCAG CAGCAACAGN ACGTTGAATC AAGCCAGAAA TGGTTGCAGG 240
CATTTTCAGTA ACACTGGACT GGATCGGAAC ACTCGGGTTC AAGTGGGTTG CCGGGAANKG 300
CGNTCCACC AAATACATCT CTGATGGCCA GTGCACCAGC ATCAGCCNTA NGAAGGAGNT 360
GGTGTGTGCT GGCGAGTGAC TTGCCCCTGC CAGTGCTCCN TAATTGGNTT GGAGGAGGCT 420
GTGGAACAAAN GTANTGGAGC AGGAGGAGCT CCCAGGNGTG GCGGTGTGTC AATGACAAAA 480
CCNGTACCCA GAGAATCCAG NTGCAGTTCC AAGATGGCNG CACACGCACG TACAAAATCA 540
CAGTAGTCGG TGCCNGCAAG TGCAAGAGGT ACACCCGGCA GCACANNGAG TCCAGTCACG 600
ANTTTGAGAG CATNTCACGT GCCAAGCCAG TCCAGCAACT CGAG 644

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

GAATTCGGCC AAAGAGGCCT ATTTNTGGAT GGTGCTAGCG AANTAGAGGC TAATCCCCAA 60
CATGAGGTTT TTCTAATTC ANGTTGTGA TTTTCCAGTG AAAGAAATNA ANAAGAATTT 120
GCAGATTCGT GGAGACTTGG GAAGGATATN AAGCTGTCTT ACAACCCAG ATTCACCCAA 180
AATTCAGCAA ATCACTGAAT ATTCNNAATA AAAATTGAAG TATTTTCNAA CTTCAGTTTT 240
TATCTCCAGA GGTNACGTC CNATGTAATC CGAAATCCTC ACGANGACAT AACCTCGAG 299

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

GAATTCGGCC AAAGAGGCCT ACAACAACAA CAAAAGAAGA ATACTAATTA GAATTTGAGT 60
TCTAGGGGTT TTTCTAGGT TTTTCATTCT AGACTTAGCT TTTATTCAA CCTGTTGATC 120

CTGCATAGGG GTAGTCTAGC TTTAAAAAAT AAAACAATAA ACATAAATGA GCCTATTGAG	180
TTCAATCAGA GTAGGGAGCA GTTTTATTGA ACAGCACATT TTCAAATTCT TCAGTTGTGT	240
TTGTGTTTTT AGCTACGTGT CTCTCTGTGA TAATGAAAAG ACAGGTTGCA AAGCCCGGGA	300
TTCGCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

GAATTCGGCC AAAGAGGCCT ACATCTATTG AGGAAAACCA CAAAAAATT CAAAACAGCT	60
ACAACGGGAA AAAGAGAGTT TTGTCCACCA GTCAGCAGGC CACTAGTTTA TTAAGTTCCA	120
GTCACCTTGA TTTTGTCTAA AATGAAGACT CTGCAGTCTA CACTTCTCCT GTTACTGCTT	180
GTGCCTCTGA TAAAGCCAGC ACCACCAACC CAGCAGGACT CACGCATTAT CTATGATTAT	240
GGAACAGATA ATTTTGAAGA ATCCATATTT AGCCAAGATT ATGAGGATAA ATACCTGGAT	300
GGAAAAAATA TTAAGGAAAA AGAACTGTG ATAATACCA ATGAGCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

GAATTCGGCC AAAGAGGCCT AGAGTGAGAC CTTATCTTAA AAAAAAAAAA AAAAAAATTG	60
TCTATGATT TTTTAAAAGC TTTTATTTT GAACATAATT TAGACTTGCT TAAAAGTTGC	120
AAAAATAAGA CACAAGTTTC ATATATCACT CAATCTGCTT CCTGTAATAT TAACAACATA	180
AATAGCCACA GGGAAATCTT CAAGACCTGG AAATTAAGTG TAGGACAGCA CTATTACCTA	240
AACCACAGCT CTAATTTGAA TTTTCATCAGT TTTTCTCTA ATGCTGATT TCTGTTCCAG	300
GATCCTATCC AGGAGCCCAC ATTGCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

GAATTCGGCC AAAGAGGCCT AAAAAAATAT AAGTAACAGA GGNAGAAATA ACTGTTATTT	60
GTCAAGTGAC AAGCTTTTAA TGTCAGAATG GCTCACCTAA AGCGACTAGT AAAANTACAC	120
ATTAAAAGAC ATTACCATAA AAAGTTCTGG NAGCTTGGTG CAGTAATTTT TTTCTTTATA	180
ATAGTTTTGG TTTTAATGCA AAGAGAAGTA AGTGTTCAAT ATTCCAAAGA GGAATCAAGG	240

ATGGAAAGGG	ACATGAAAAA	CCAAAACAAG	ATGTTGGATT	TAATGCTAGA	AGCTGTAAAC	300
AATATTAAGG	ATGCCATGCC	AAAAATGCAA	ATAGGAGNCA	CCTGTCAGGC	AAAACATTGA	360
TGCTGGTGAG	AGACCTTGTT	TGCAAGGATA	TTATACAGCA	GCAGAATTGA	AGCCTGTCCT	420
TGACCGTCCA	CGTCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:298:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 428 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GAATTCGGCC	AAAGAGGCCT	AATTATTTCT	TGTCTCTCCC	CAAATGAAAT	CTGGGACATT	60
ATGACAATTT	ATTTTTCTAA	GGATGATCTT	GGTCTGCCT	ATTGAAATGT	CCTCACTCAC	120
CTCCAAGAGG	AAGGGGGATG	GCTTCAGAAA	ATGTCTTTAA	GTGTTTTTAT	TTTTACAGAG	180
TTATTTATTG	CAACACTAGC	TCTTCCCTGC	AGGAAGCTAT	ATAATTGTGT	GCTTAATTGG	240
TAACATAGAA	GAATTCCTAG	CTACTTCCTA	GAGAATATAC	TGTTGAATTC	CTTGTCACCTC	300
AAGTATCTGT	TAAAAACTCA	ACCGTGGGAA	ACAAATGTCTA	TGGATGCCTT	TGGGAAAATA	360
CACATTTTAC	CTATTATTTT	ATCTTTTTTC	TCACTTTGTC	AAGTAGTAGG	TACCCCACTG	420
TACTCGAG						428

(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAATTCGGCC	AAAGAGGCCT	AACATTATCG	ATTCCATTTT	TTTACTGTTG	TAATTCTGCT	60
TCTTATTGCC	TGTGTAAATT	TCTGCTCTAT	ATTAGTTTCC	TGATACCCTA	TCATTAAATTC	120
AGTCTGCCCT	TTTTTCATAT	CATTCTACTG	TTTGTCTCA	TCTTCCTTAT	ACTTTATTCA	180
GAGACTGTGT	TTTCATGAAG	TTTGTGAAAA	ACATTTTAAA	AATTGTTTAA	AATGTACTCT	240
TTGTCTATTT	CTTGCTATTT	TTTCTTTTTG	ATATTCTGGA	ATATATCCAC	AGCGCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:300:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GAATTCGGCC	AAAGAGGCCT	ATAGATTGTT	ACATTTGTTT	TGTGCATTCC	ATGAAGTTTC	60
TTACCCTTAG	AGTTATTTCT	GTCTTAGTAA	CAGCAACAAG	TGGGAATGGA	GACTTTGGTG	120
ACTGGAGTGC	CTTCAACCAA	GCCCCATCAG	GCCCTGTTGC	TTCCAGTGGC	GAGTTCTTTG	180

GCAGTGCCTC ACAGCCAGCG GTAGAACTTG TTAGTGGCTC ACAATCAGCT CTAGGCCCCAC 240
 CTCCTGCTGC CTCAAATTCT TCAGACCTGT TTGATCTTAT GGGCTCGTCC CAGGCAACCA 300
 TGACACTCGA G 311

(2) INFORMATION FOR SEQ ID NO:301:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 392 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GAATTCGGCC AAAGAGGCCT AGCGCGGTGT GTCGTGGTGT GGCGCGGTGT GGCATGGCGT 60
 GGTGTCCCAG CTTGCTACAC ATTTGTGGTT TTAAATGTT TGTGGGATAC AGTAACACTT 120
 TGTTAATTTT AATTATATGC AAGATAACTT GATTGCCCTA AAACAGCCAT TTGGGTCAAG 180
 ATAAAGCCAT CGCCCTCTGA AGGGGCNTGA GCTGGGTGTC TCCTCCATCA GTCGNTGTGA 240
 TAACTCTATG CCAGTTTCGA TTTCCAAAGT CAGAAGTGCA AAGCAGGGCT GGTTATTAAT 300
 CNTGTCAAAT CGTCCAGGTC CTGTGTNGTC GNACTCCATT ANTTATNTAG GTCCATANGA 360
 TGTGTCTTAC NACGNAACAA ACCCTCTCG AG 392

(2) INFORMATION FOR SEQ ID NO:302:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 387 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GAATTCGGCC TTCATGGCCT AATGGAATTT GAGTCCAAAG GTAAATATAT TAAACATATA 60
 GATAAGAAGA AAAGAAAAAC GTTATTTAAG TATCTGATCA GCTCTGCACC CCAGGGACCT 120
 CCACTTTTGC CCAGGTTTGA GAATTTGATC TATAGAATTA CCTGCATTCT TTCCCCTCA 180
 TCCATCCAAT CAGCCACCTT TCTCCCTTCA AAGAAGTGTC TTCATTTTTT TCCTTCTTTT 240
 GTTATTTTTT TTGACTGCCC ATCACTGTTA TTAAATCCTT CCCTCTTTTT TTGAATGAAG 300
 CAGCAGAGCC TTTTATTTG TTTTCCTTGT TTTGTTTTTT GTTTTTGTGT TTCAGAAATG 360
 ACAGGGCTGT ATCACAGCAG TCTCGAG 387

(2) INFORMATION FOR SEQ ID NO:303:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

GAATTCGGCC TTCATGGCCT AAAAATTAAG CAAGCAATAC CTAGCCAATA GTTCTGCTTA 60
 ACTTTTNGGT TAAGTATTTT GTTGGGATTC CTATAAATAA TTTTTCACAC AAAGTTTTAA 120
 ATTTCTGGTG TACTTTGACT CTCAACTGAG AGTGGATAGA GTTTTCTTTT TGAGGATTAC 180

ATCTTAAAT GTCCATCGCC TGGCTGGTTA TAAGCATTTG TCACCTTTTG AAGGTAAAT	240
ATACTCTGGC CCTTCTTGAC TCAGTTACAG GTCATTTTAG GTCCAGTAAT AAGAGTCAGG	300
TGTTTGGTTA TTGCTTTCAG AGTCAGACAA ATCTCGAG	338

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCGGCC TTCATGGCCT ACGAAGAAAA AATATTTTNG AGAGAATTTC CCAGATTGAA	60
AGAAGATCTG AAAGGGAACA TTGACAAGCT CCGTGCCCTC GCAGACGATA TTGACAAAAC	120
CCACAAGAAA TTCACCAAGG CTAACATGGT GGCCACCTCT ACTGCTGTCA TCTCTGGAGT	180
GATGAGCCTC CTGGGTTTAG CCCTTGCCCC AGCAACAGGA GGAGGAAGCC TGCTGCTCTC	240
CACCGCTGGT CAAGGTTTGG CAACAGCAGC TGGGGTCACC AGCATCGTGA GTGGTACGTT	300
GGAACGCTCC AAAAATAAAG AAGCCCAAGC ACGGGCGGAA GACATACTGC CCACNTACGA	360
CCAAGAGGAC AGGGAGGATG AGGAAGAGAA GGCAGACTAT GTCACAGCTG CTGGAAAGAT	420
TATCTATAAT CTTAGAAACA CTTGAAGTA TGCCAAGAAA AACGTCCGTG CTCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC TTCATGGCCT AGACGAGCGG AGTAAATCT CCACAAGCTG GGAACAAACC	60
TAGTCCCAAC TCCCACCCAC CGGCGTTTCT CCAGCTCGAT CTGGAGGCTG CTTCGCCAGT	120
GTGGGACGCA GCTGACGCCC GCTTATTAGC TCTCGCTGCG TCGCCCCGGC TCAGAAGCTC	180
CGTGCGGCG GCGACCGTGA CGAGAAGCCC ACGGCCAGCT CAGTTCTCTT CTACTTTGGG	240
AGAGAGAGAA AGTCAGATGC CCCTTTTAAA CTCCCTCTTC AAAACTCATC TCCTGGGTGA	300
CTGAGTTAAT AGAGTGGATA CAACCTTGCT GAAGNTGAAG AATATACAAT ATTGAGGNTA	360
TTTTTTTCTT TTTTTTTTCA AGTCTTGATT TGTGGCTTAC CTCAAGTTAC CATTTTTTCAG	420
TCAAGTCTGT TTGTTTGCTT CTTCAGAAAT GTTTTTTACA ATCTCAAGAA AAAATATNTC	480
CCAGAAATTG AGTTTACTGT TGCTTGATT TGGACTCATT TGGGGATTGA TGTTACTGCA	540
CTATACTTTT CAACAACCAA GACTCGAG	568

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GAATTCGGCC	TTCATGGCCT	AATCAAAAAT	ACCTTACCTT	GTTCTGCCCT	GTGAAAGTAG	60
CCTAAGGCCT	GTCAAAAACA	CAAAGAGCCC	AAACATAATA	AAAAAGATTA	AAGAAGACAA	120
TATTAAANAA	GCATTGTCTC	AAAGATCTAC	TGCTATATTA	TATTTAAGTC	AGGAAGTAAA	180
TCATCTTAAA	ATAATGGTCA	CTTCTTCAAC	AGTGAGAGTT	AACACCCAAA	GTGAACGTAA	240
CACTTCAATC	ATCAAGATTA	CAATATATGG	ACTACTTCTG	GTAATAACTT	GGTTGCTGTT	300
TAGAACTTGT	ACCAAATAA	CATCATGTGC	AGAGAGGAAA	GAACTCGAG		349

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GAATTCGGCC	TTCATGGCCT	AGTGATGGGG	ATGTGATGTG	GGCATCTGCT	AATTCGTCTG	60
CAACTACATG	ACCTAAGATG	GCCTCATTAA	TCTAAGGGGC	CTCAGCTGGA	ACACTTGCCT	120
CTGCTGGATA	ACCCAGGTCT	AGTGTTATCC	TCCAGACTAG	ACCTGGCTTC	TTCTGTGGCA	180
GTCTCAGGGC	AGTGTTCCAA	GACGGTGAGA	GCAGAAGCCT	AGGTTTGGCC	ACATATCCCT	240
AACTCATAGG	ATGGTGACAT	AAACTCTACC	TCTTATGGAG	AAATAGCAAG	TTACTCTGCA	300
TACGGGACGA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

GAATTCGGCC	TTCATGGCCT	AGTGGCAACG	ACTTGGACAT	CTGAGCTGTC	ACTGCCGAAA	60
ACAGGCCGCA	AGAGAGATAA	TCAATATGCA	TTTCCAAGCC	TTTTGGCTAT	GTTTGGGTCT	120
TCTGTTTCATC	TCAATTAATG	CAGAATTTAT	GGATGATGAT	GTTGAGACGG	AAGACTTTGA	180
AGAAAATTCA	GAAGAAATTG	ATGTTAATGA	AAGTGAACCT	TCCTCAGAGA	TTAAATATAA	240
GACACCTCAA	CCTATAGGAG	AAGTATATTT	TGCAGAAACT	TTGATAGTG	GAAGGTTGGC	300
TGGATGGGTC	TTATCAAAAAG	CAAAGAAAGA	TGACATGGAT	GAGGAAATTT	CAATATACGA	360
TGGAAGATGG	GAAATTGAAG	AGTTGAAAGA	AAACCAGGTA	CCTGGTGACA	GAGGACTGGT	420
ATTAAAATCT	AGAACAAAAC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

GAATTCGGCC	TTCATGGCCT	AGAAGTTCCT	TATGCTACTT	TCAGTGAGCA	TCCTATGAAA	60
TACACCAGTG	AGAAATTCCT	TGAAATTTGC	AAGTTGCTG	GGTTCATGTC	TAAGCTTGTT	120
CCAGCTATCC	AGAATGCCCA	CAAGAATTCA	ACTGGATCTG	GAAGAGGAAA	GAAACTGATG	180
GTGTTAACTG	AACCCATTTT	GATTGAGACC	TACACAGGGC	TGATGTCATT	CATTGGAAAC	240
CGCAACAAAC	TTGGCTATTG	CCTTGCCCGT	GGGAGTATTG	GTTTTTGAGA	GTCTTTTGG	300
TACCATAAGC	ATATCATCCA	CAGATATGTC	ACTTTGAAAA	TTCCAGTTTG	ACCCACGCTA	360
TTTTTGGACT	NAAACAATTA	ATTATTTTTA	AATGACGCTT	TATGATTAG	AAATTTAGTA	420
TTTCCGAAAA	TTTAAAAGCT	TGATTGGACT	GATAGATACA	CACTTTAGAC	CTCATACAAG	480
AATAATCAAA	TTTTCTTAAA	ACTAGAAAAT	AAATGCTGCT	GATACCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

GAATTCGGCC	TTCATGGCCT	ACACTCATGC	TGCCAGTCCC	CAAAAGACTT	CATTCAATCA	60
ACATATATGT	GACCGCCTGC	TACGTGCCAG	GCGTGGGCCA	GGTCCTAGGG	ACAAAGGAGA	120
GGCCTCCGCA	CCCCACCCCA	TGACCCATAC	CTCCTCTTCC	CCACCTCCCT	GGGCCAGCCT	180
GCCTTCCTTC	TCCCTCCTCC	TCCTTCCTGG	GGGAAGGAAG	CCCCACCTTC	TGTGCGCAGT	240
CAGCTCCTAA	GCACGCTCCC	GTTTCCCCTG	GCCTCCCCAT	TTAAAAAGGG	AGGCAAAGGA	300
TGTCACCACT	GTCATACAC	TCATGGCTTT	GCTCTGGGAA	GTCCTGCAAA	TAAATGAAA	360
GTTCTCCAAC	CCGTACTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCT	TCATGGCCTA	CTTTGACGCA	CCAGGCACAA	CCCAGAAAGA	CGAGATTGTG	60
GAAATCCATG	AGGAGAATGA	GGTCGCATCT	GGTACCCAGT	CAGGGGGCAC	AGAAGCAGAC	120
GCAGTTCCTG	CACAGAAAGA	GAGGCCCTCA	GCACCTTCCA	GTTTTGTGTT	CCAGGAAGAA	180
ACTAAAGAAC	AATCAAAGAT	GGAAGACACT	CTAGAGCATA	CAGATTAAGA	GGTGTCACTG	240
GAAACTGTAT	CCATTCTGTC	AAAGACTGAG	GGGACTCAAG	AGGCTGACCA	GTATGCTGAT	300
GAGAAAACCA	AAGACGTACC	ATTTTTCGAG	GGGCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GCCTGCCTCG	AGTCTTGGAT	ACATCACACT	TGAGTCAAAT	CCTGGATACT	GCCAAAGGAA	60
CCTGAAAATC	CAGGAGACAA	CGCTAGCTAT	TCCTGTGAAC	CTCTAGAGGA	TTTGCGCCTG	120
CTCTTCAAAC	AACAACCAGG	AGGAAAGTAA	CTAAAATCAT	AAATCCCCAT	GGCCCTCCCT	180
TATCATATTT	TTCTCTTTAC	TGTTCTTTTA	CCCTCTTTCA	CTCTCACTGC	ACCCCTCCCA	240
TGCCGCTGTA	TGACCAGTAG	CTCCCCTTAC	CAAGAGTTTC	TATGGAGAAT	GCAGCGTCCC	300
GGAAATATTG	ATGCCCCATC	GTATAGGAGT	CTTTCTAAGG	GAACCCCCAC	CTTCACTGCC	360
CACACCCATA	TGCCCCACACT	CGAG				384

(2) INFORMATION FOR SEQ ID NO:313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GAATTCGGCC	TTCATGGCCT	AGGGGGGTGG	GCTGATGGAG	GGTAAGTAAA	ACCTCCTACT	60
GGAAGATGTT	CTCCTAAGAG	TTCCACTTCA	TTTTCTATCC	TTTGAGAGG	CGATCGTGAT	120
TGCTGTGTTT	GGAAAGGGAC	AAACTGGCCT	GGTGGTGGCA	AATGAGGAGG	ATGATGGGGA	180
GAAAGGTGAG	GAGGATGTAT	AAGAAATGGA	TCACTAGAAA	TAAGGGGTGG	GAATGCAGCA	240
TATGGTACTG	GTAAGTGCTG	AACTGAACAT	GCCTGAAGCA	TTGGAGGAGG	CACACTACAG	300
ACAGGGAGGT	GCTGTCCACT	GAAAACCACA	GAGCATCCTG	GGACCTGCTG	TGTACTACAA	360
GCAGGGATGT	GCTGGCCTGT	GCAGAGTGGA	ATCCCATGTG	GTGCCACTGT	TGTTACTGTG	420
TAAGAAACAG	GGACTGTTCC	TTGATGGAGC	TGATCATGTA	TGTCAACCAT	GACTGCATTC	480
TGCTGGGGTG	GATGAGCAGC	AGGATGTAGC	AGACGGGGAG	ATACATTCCG	AGGGTGGAAG	540
GCTCGAG						547

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

GAATTCGGCC	TTCATGGCCT	AATTTGTGGC	TTACCTCAAG	TTACCATTTT	TCAGTCAAGT	60
CTGTTTGTTC	GCTTCTTCAG	AAATGTTTTT	TACAATCTCA	AGAAAAATA	TGTCCCAGAA	120
ATTGAGTTTA	CTGTTGCTTG	TATTTGGACT	CATTTGGGGA	TTGATGTTAC	TGCACTATAC	180
TTTTCAACAA	CCAAGACATC	AAAGCAGTGT	CAAGTTACGT	GTGCAAATAC	TAGACTTAAG	240
CAAAAGATAT	GTTAAAGCTC	TAGCAGAGGA	AAATAAGAAC	ACAGTGGATG	TCGAGAACGG	300
TGCTTCTATG	GCAGGATATG	CGGATCTGAA	AAGAACAATT	GCTGTCCTTC	TGGATGACAT	360
TTTGCAACGA	TTGGTGAAGC	TGGAGAACAA	AGTTGACTAT	ATTGTTGTGA	ATGGCTCAGC	420
AGCCAACACC	ACCAATGGTA	CTAGTGGGAA	TTGGTGCCA	GTAACCACAA	ATAAAAGAAC	480
CACACTCGAG						490

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```
GAATTCGGCC AAAGAGGCCT AGGAAGTAAC AGTGTATCAT GTATGCCACT GATTCCAGGG 60
GACACTCCCC TGCTTTCCCTC CAACCTCAGA ATGGAAATAG TCGTCACCCA TCTGGCTATG 120
TTCCAGGGAA GGTGTGCCA TTGCGTCCCC CTCCTCCTCC AAAGAGTCAA GCTTCAGCCA 180
AATTTACCTC CATCAGACGA GAAGACCGGG CAACCTTCGC ATTCTCACCT GAAGAACAGC 240
AAGCCCAGAG AGAAAGTCAA AAGCAAAAGA GACACAAAAA TACTTTCATT TGTTTTGCTA 300
TTACTAGTTT CTCATTTTTT ATAGCACTTG CAATCATTTT AGGAATATCC TCAAAATATG 360
CTCCACTCGA G 371
```

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```
GAATTCGGCC TTCATGGCCT AATTAAATG TGGACAGATT GGAGGGGAAA GGTTCGAGC 60
AAAAATCATA AGTAGAAGGA AACAGAATGG TTAAGTACAC AGTGTAGTAG CCATTTAGGA 120
AAGTTATAAG CCATTTAAAT GCCATGTATA AAGTGTTTTT GATAAGAAAA AATCAAAGTG 180
TAAAGGAGAA TACAAAATTA TATGTGTACT CGGACACAT CTGTATTGTT CTGTGTATGG 240
AAAACAGACT GGGGAGAAAT AGCTTTAAGT CCTAATAGTA ATTTTCTTTT TCTCTCTCT 300
TTTTTCTGCT TTCTCTTTTC CCTGTCTCCC TCAATATTGC ATATCTTTCC CATTAAAAAG 360
TATTGTATTA TATATCTACC AACAAGACAT TTGTTTCAGA TTTTGTGGTT TTGTCTTCAA 420
GGAACATTCT TCTGCATACA AACTCGAG 448
```

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

```
GAATTCGGCC TTCATGGCCT AGAGATGGGG TTTTGCCACG TTGCCAGGC TCATCTCCTC 60
GAACTCTTGG ACTTAAATGA TCCTCCCGTC TTGGCCTCCG AAAGTGCTGG GATTACAGGC 120
ATGAGCCACA GTGCCAGCC TCTACCCGCT TTCTGTGGTC AGAAATAGAC GCAGGACATT 180
CCATCCATAC CTTATTTCTT TCCTGGCTCT TCTCCCATGT GTCCTCGTGG GTCCTGGTCA 240
CCCTCTTAGC TGCTGTGTAA TAACCCCTGT GCAGATGCAG CAGCCACGAT GTCATCAGTC 300
CCCACCCAGT GATGCATAGG GGGCTTCTTC CCCTCCCTGG GTACAGCACT ACCAATTCCT 360
GTGTATGGGC CGTGTGAGGC AGGGGCCACG TCCTGGCCCC GCTTCAGTCC CGGCTCGGGC 420
TCCTCGCCGG GGTCTCCATG CCACTTCCCT CTCCCATCTC CACATCTCGA G 471
```

(2) INFORMATION FOR SEQ ID NO:318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

```

GAATTCGCCT TCATGGCCTA CAGCATCGTC GGGACCAGAC TCGTCTCAGG CCAGTTGCAG      60
CCTTCTCAGC CAAACGCCGA CCAAGGAAAA CTCACTACCA TGAGAATTGC AGTGATTTCG      120
TTTTGCCTCC TAGGCATCAC CTGTGCCATA CCAGTTAAAC AGCTGATTCT GGAAGTTCTG      180
AGGAAAAGCA GCTTTACAAC AAATACCCAG ATGCTGTGGC CACATGGCTA AACCCTGACC      240
CATCTCAGAA GCAGAATCTC CTAGCCCCNC AGAATGCTGT GTCCTCTGAA GAAACCAATG      300
ACTTTAAACA AGAGACCCTT CCAAGTAAGT CCAACGAAAG CCATGACCAC ATGGATGATA      360
TGGATGATGA AGATGATGAC GACCATGTGG ACAGCCAGGA CTCCATTGAC TCGAACGACT      420
CTGATGATGT AGATGACACT GATGATTCTC ACCAGTCTGA AGAGTCTCAC CATTCTGATG      480
AATCTGATGA ACTGGTCTCG CTCGAG                                         506

```

(2) INFORMATION FOR SEQ ID NO:319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

```

GAATTCGGCC TTCATAATTT TTCTTATCTT CATTCTTTTCG GGTGCCCAA TAAGCTCATG      60
TTTTCCATGG TCGGTTTAGT TTTTACTAGT CGTTGGCTAG TTTCTTAATT GCATGTGAGT      120
TAGCATGTGG TGATGGCGGA GTAATGTCAT GTCTGGAGA GAACATTGCT TGAGTTCCAA      180
ACTTAGCTTT TCTACTTCTT GGTGAGACTT TGGACAAATT ATTTTGTAGC TTGTTTCCTC      240
ACTTAAAAAA ATGGGGTTTG TACCTTTAGT TGTTTCAACT GTTGTGAGGA CTTGAATAAT      300
AAAGTATATA GCTATAGATA AGAAAACCTG GGGGACTCGA G                                         341

```

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTC AAAACCTTGA AATGACATGT TAAAATGCTG      60
CTTTGAACTG GTTTTTCTTT AGCCTGTAGA AAAGAACTTT GAGTTACTGG TCAAGTAGTT      120
TTGACCATAC TGGCTTAGGA AAACAGCGCA TCAGCTGTCT GATTGCTATC ATGTAAAAAT      180
CTGTGAACGA CTTTGAGAAG TCATTGGTGG ATTATGTTGT TCAGGAATAG GAATGGAGCT      240
TTCTTCCTAT CACTTGATTT TTTTTTTTTT TTTGGAAGGG GGGAGGAGGA GGAATTATTT      300
CCNCCCTAAT AAANGGNGGN NTAATCCTG GGCCCNNA AGGCTGGNNN GGGTCCNGAT      360
KTGGGGGTNC NNTTTATTGG GAACTGACNG GGNTTTAATT TTCCGGTTTT TTTTTTTTCT      420
TGAATGATCT TGTGTTGTAG AGTTGAATAC AGTTCTAGGG AAGTATGATC ACAAATGAA      480
TGTTGGCAGT TCCTCCTATG ATTAATATGT CAGACATGTC AAAATTCTCT CATCATGTGT      540

```

ATTTGCCGGG TTTATTCACT CCAGGACTCG AG

572

(2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 342 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

GAATTCGGCC	TTCATGGCCT	AGATAACTTT	GAACAGAATG	GGAGGCAGGT	TTACCCTAAG	60
CAGTTCCCCA	CTTGAAGTTT	TCCTTTAGTT	TAGTGATTG	AGGGGCCCAA	AATACTTTCA	120
CATTTCCCCC	CTTTCTTTT	TAAAAATCTG	TTGGAGAACG	CATTTTAGAA	GAAAATGAGT	180
CTCTGGCCTC	AGGTTTCGTC	TGATCTCTCA	TGGCTAGGAT	GGTTTATTCC	TAGATAGATA	240
GGTCCTGAGT	TATTAGGAAA	GTCCTTTTT	AGAAGGTTGT	GAAGTCTCAT	GTCTGTGAA	300
GAGAAAATAG	GGGGAGGACA	ACAACAAACA	AAAGAACTCG	AG		342

(2) INFORMATION FOR SEQ ID NO:322:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

GAATTCGGCC	TTCATGCCTA	CAATATTGTT	TAATAATTAT	TCAGAAATAT	TCAAGTATAA	60
TACTTAATAA	AAATTCTGTC	TATGTGCAAG	GCATGGTGCT	AGGTACTGAG	ACTATAAGGA	120
GGTAAAAGAT	AGTTCCTGCC	CTTAAAGACT	TCTATAATTT	AATCAGAAAG	GAGAGTATAT	180
GAAAATCATA	CTGAATAAAA	AGTGGCTCAT	AATAAATGCC	AAGGAATCAA	CACAAAGTCC	240
TTTCCCTGGT	AGGGAAAGTT	TTTTTGAGGA	AATGGGACAT	GAATTTGGCT	TTGAAGGATG	300
TGGAGGGTTT	AGATAAGAGG	GAGAACTGT	TGTGTTCTAG	GTTAGAGGAA	CAACATAAAC	360
TCAAAGAGA	CTAAGAAGA	ACGGACTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:323:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

GAATTCGGCC	TTCATGGCCT	ACCCTGAGCA	GTGCCTGGCC	CATACTGGAT	ACACAGTGTG	60
CATTTTGTGG	GGACTCAAGG	AAGGAAGGTA	ATATTCCAGC	TCAGGGTTCT	CTCTGACCCT	120
GAATAGTGT	ATGGACTCTT	TGGGAAGGAT	AGAAGCTTTC	TTAGTTTTCT	GACAGAGGCC	180
TGTAGGCTGC	AAACGTTGTG	TTTGTAGAAA	GAGTTGTAAA	GGTGTCTATG	GCCTTTATTT	240
AAAAGTGTCT	TTAATGTATC	TTAGGCATCT	TTTTCTTTTC	ATCTCACACT	ATGGACAGTT	300
TTAAGTGCAA	AAGGGGAAC	CGAG				324

(2) INFORMATION FOR SEQ ID NO:324:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```
GAATTCGAGC TCGACTGGAT AGTTTTTCTT TTTAACTTA AAATGCTTTT TAGTTTGGCA      60
CTCCGTAGTA AAGGAGGTTT CAGAAGCCAG TAAGAGAACC TCTGCCAAT ATGAAAGAGA      120
AGATATTTCT ATCTACAAGT TATTTTCAGGA TCAATTATTC AATTAATATT TTATATAATA      180
GAAAGGTTTT ATTTGTTAGG ACTTTATCTT TAAGTTCCCC AAGAGTAAAA AGGTCTAGTC      240
ATTATTATAC TGTGGGAGAA TGATAGAAGA TTGATTACAT TGAAGTCCA GAACTTCTAT      300
TTATTAAAAA GATTTAAGAT TTGACACACT CTCGAG      336
```

(2) INFORMATION FOR SEQ ID NO:325:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```
GAATTCGGCC GGCATGGCCT AANCTAAAAA TAAATNAAC CCAACGCATA NAANACGGGT      60
TTATCTCTCC TAAAAACANT TNAGTTNGA CTTAAATGAA ACANATCATN NNACAACNTC      120
ATTTTNAAT GAAGATTTTA CCTGGACCCCT AGGTGTGCTA TTCTTCCTAC TAGTGGACAC      180
TGGACATTGC AGAGGTGGAC AATTCAAAT GAAAAAATA AACCAGAGNA GATACCNCG      240
TGCCACAGAT GGTAAAGAGG AAGCAAAGAA ATGTGCATAC ACATTCCTGG TACCTGAACA      300
AAGNATAACA GGGCCAATCT GTGTCAACAC CAAGGGGCTA GATGCAAGTA CCATTAAAGA      360
CATGATCACC AGGATGGACC TTGAAAACCN GNAGGAAGTG CATCTCGAG      409
```

(2) INFORMATION FOR SEQ ID NO:326:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 502 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

```
GAATTCGGCC TTCATGGCCT AGGCGGCGGC AGCCGAGGGC GTACTGGCGA CCCGGAGTGA      60
TGAGCCCGCC CGAGACGATG CCGCCGTGGA GACAGCTGAG GAAGCAAAGG AGCCTGCTGA      120
AGCTGACTTC ACTGAGCTCT GCCGGGACAT GTTCTCCAAA ATGGCCACTT ACCTGACTGG      180
GGAAGTACG GCCACCAAGT AAGACTATAA GCTCCTGGAA AATATGAATA AACTCACCAG      240
CTTGAAGTAT CTTGAAATGA AAGATATTGC TATAACATT AGTAGGAAT TAAAGGACTT      300
AAACCAGAAA TATGCTGGAC TGCAGCCTTA TTTGGATCAG ATCAATGTCA TTGAAGAGCA      360
GGTAGCAGTT TTTGAGCAGG CAGCTTACAA GTTGGATGCA TATTCAAAAA AACTGGAANC      420
CAAGTACAAG AAGCTGGAGA AGCGATGAGA AACTTATTTT TATGGGACAG AGTCTTTTTT      480
```

TTTTAATGTG GAAGGACTCG AG

502

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC	TTCATGGCCT	AGAATATTCC	ATATCAGTAC	ATATAGCACT	GCCTCACTTT	60
TTAATGGCTA	TATAAAATAG	TACTATAATT	TTTAACCACT	CACCTGATGG	TGGGCTTAGT	120
AGTTATTCTG	TGGCTGTAAC	CAACATCACT	GCCATGTGCA	CTGGTACACA	TACAGAAGTC	180
CACACAAGTA	GGCCTGTATC	TGTAAGGTAA	ATACTGGTGG	GATTACTGAG	TGAAAGGAGA	240
CGTGAATTTT	TAGATTTTTA	CTATGAAAGA	CAAACCTGCTC	TTTATGGGGA	TTTTATTAAT	300
CTACAACCCC	ATCAACAATG	TATGAGAGCC	CATTTTTCAC	ACACTTGCCA	ACTCAGTAGG	360
TTATTAAACC	TTTGGTCTC	TGCCACTTGT	ATATCCCGA	TCAACTTCTA	ATTCTGCTTC	420
ATATTGTTTG	CTATCCTTTA	GAATATTTCT	GTCCACCTT	GTCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	TTCATGGCCT	AGGGAAAGGA	AGTGACATAG	TGGTATAAAA	ATTTGAAATT	60
TGTGATGTGG	CTTAGAAGCT	TGATATATAC	GGGTATGATT	GCAGCTGCTA	CATTTAGCCT	120
TTTTTCTTTT	CTTTTGGAG	AATGAACCGC	ATTAAGAAAT	ACATTTTACA	TCACAATTTA	180
GCAAGTATAT	GTGCTAACAT	ACTTCTGTTT	CTACAAGGGA	TGTATTGTGG	TATTTTCTAT	240
TGCATTTTAC	TCTAATTTAG	TTCATTTAAA	AAAATGCTGA	TTCTAACCCA	TGAACCTGAG	300

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	TTCATGGCCT	ACCACCACAC	CCGGCTAATT	TTTTGTATTT	TTAGTAGAGA	60
CGGGATTTCA	CCATGTTAGC	CAGGATGGTC	TTGATCTCCT	GACCTCGTGA	TCCACCCGCC	120
TCGGCCCCCC	AAAGTGCTGG	GATTACAGGC	ATGAGCCACC	GTGCCTAGCC	GACTCTTGAG	180
TTTTGACAAG	AGGTGATATC	TGGGAGATTA	ATAAGTATTT	AGTTTAAGAA	AACATTTAGT	240
AAGCCTGTCC	TGTGTTCCCA	CACAAAGGGT	ATAACAGCAA	TATATTCCAT	AAGAGTAAAG	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:330:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 523 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

```

GAATTCGGCC TTCATGGCCT ACATTACCAT CAGATTGACA TATTTAATTA TCAGATATCT      60
TTCTTTTGCC AAAAAGTTGT GGTGAGTTG GCCCTGGGAT TTATAAATAC ATGCACACAG      120
CACATTTCTG TCATTGTTCA CTGCAGTCTT TTAACACATC TTCTCAGCAA TATTCTTAAT      180
GTTTCCAGCG GGAAAATTGT AAATTATTTA ACCACTGAAT TAGAGGTGTG TTGTTTTTTA      240
GCTAATCAAT AGCCATTGAA TGCTTAAATG GGCTTTAAAG TAGACAAAAG TAAAAGACAG      300
CAAAGAAAAT TAATCAGTAA GATTGCCCAT ACTCCATAGA CACTTGAGCA GCTACTTTAG      360
TCATTTTGAA ATACACGCTT TATGTTTTCC CTTGGACTGG CATATTCCTG TCATTATATA      420
AAAGAATATA CATTGTGAAA TTAAAGGTGT GGACATTCAT TATTGAAGGT AGAAATAGTT      480
ATAATCATCA GTGTCTAGAT ATATCTGAAG AGAGGTACTC GAG                          523

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(2) INFORMATION FOR SEQ ID NO:331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 423 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

```

GAATTCGGCC TTCATGGCCT AAAGTAGGCA AGGGATAATA ACCAAAGAAG NAAATTTTCAT      60
GAAGACTAGA CATCATAAAG CATAATTTTA ATAGTCACTC AACCAAGTAT TTTTATTTT      120
TTATGGATAC TCTGAATGGC AATTAAATGT GAAACCCAGT TTCTTGGGCA AGTCAAATTC      180
TGGAATCACA TCCACCTAAA TTAAATGAC TAGCTCGTAT TTTCCCCATC TTCAAGTTTC      240
ACATCCTGGT CATCAAAGA CTCGACAGCA AGACTTAGAA TGAAAAAGGG TACTTGTTTA      300
TATTAATATT TTTACTTGA ACACGTGTAG CTTGCAGCAG GTTCTTGATG AATGTGCTTT      360
GTGTCCAAAA TGCCTCCCCA TTGTACACAG GTGTACACCA TGCATGCACC AACACCACTC      420
GAG                          423

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(2) INFORMATION FOR SEQ ID NO:332:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 410 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACAAGCCACA AACTGTGGT GAATGGAAAA GAATGTATAA      60
ACTTCGCCTC ATTTAATTTT CTTGGATTGT TGGATAACCC TAGGGTTAAG GCAGCAGCTT      120
TAGCATCTCT AAAGAAGTAT GGCCTGGGGA CTTGTGGACC CAGAGGATTT TATGGCACAT      180
TTGATGTTCA TTTGGATTTG GAAGACCGCC TGGCAAAATT TATGAAGACA GAAGAAGCCA      240

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TTATATACTC ATATGGATTT GCCACCATAG CCAGTGCTAT TCCTGCTTAC TCTAAAAGAG	300
GGGACATTGT TTTTGTAGAT AGAGCTGCCT GCTTTGCTAT TCAGAAAGGA TTACAGGCAT	360
CCCGTAGTGA CATTAAGTTA TTAAAGCATA ATGACATGGC TGACCTCGAG	410

(2) INFORMATION FOR SEQ ID NO:333:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 376 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

GAATTCGGCC TTCATGGNCT ACCTTAGCCT CAGCTCTTTC TTCTGGGTTG TTTGTATTTT	60
CTTTTCTGTC CCAAACAGTT TCCCCACAA AAAGAAGTTT ATGTCTTTCT CTGTCTTCCC	120
TCAGTCCTTC CAGTCAGCAG CCTGTGATTG GGCTTTTCCC CTCAGAAACG AACAAATCCAG	180
AACCCACTGT TTAACAAC TGTATTTTGC CTTGGGAAGT CCCATTGCCT TCCCTGAAAA	240
CATTAAACAT TCCTCCGATC CCCAGCCTGA GTCTCTCTGT CTCTGGGCCC CATCCTGCTC	300
CACAGCAGGG CTGGTGTGTC CAGCACAGAG TGACCCTCCG ATGCCCTTTC CCACCCGCCG	360
CNTGCCTCC CTCGAG	376

(2) INFORMATION FOR SEQ ID NO:334:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GAATTCGGCC TTCATGGCCT ACGGGTTGTT ACATATTTAT TCTTTTTTGA AGCCCATCAC	60
TACATCGCCA TTACGTTTCA CACTGTGTAT GTAACAAATG TTACCACTTT GTTCTTTATT	120
CCTTTTTGGA TCATCTTCAG TGGGGGTAAA ACAGTATCAA GCTCTAGAGC TCCCTCTGGT	180
GGTTTTGTG ACATATTTGA AGATGGCAGC TTGCTTTTTG AGAATTTCTG GCTCTGCTCT	240
CCCTGTTTTT ATCTGTACTT TTTTCTCA TTGTGCCTCT TGCACACACA CACCCCCCCC	300
ACTCGAG	307

(2) INFORMATION FOR SEQ ID NO:335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAATTCGGCC TTCATGGCCT ACATTACTCA GCTTTCCTGA ACAACCAGGC ACGACCCTCT	60
GCCTGCAGGC CAGGCACGTG CTGCTGCCCC TGGAGGCGGG TGGGGGTGCC TCCGCGCTGG	120
AGGACACGGG GTGCACTGAG GCTTCCATT GGTGATGGGG GAATGTGGTG ATGAGGGGAT	180
CGGGTGCCCG CGGACCGCAC ACATGCCATG TGTGGACACT CAACAGGAAG CTTCCGCTCAG	240

CATTTTCAGCT	GGAAATGCAG	AGCCAGGGCC	CTGGAAAGTC	CCTCAGCAGC	TGTGCACAGG	300
CCTGCTCACC	GTGCGTGTGC	GGGCAGAGCC	TCCCTGGGGA	GGCAGAGGCC	CCGCGTTCTG	360
CACTCGAG						368

(2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 437 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TTCCTGCTCT	TCTAGGTAGT	60
CACACTTCAC	TAAAGTGTCA	TCCACCAGTG	TGTTGAATCC	GAAGAATGAC	AATTTTCTAC	120
CACTGGTGTA	AAAAACAAAC	ATTTGAAGAC	CCTTGTGCAT	TGTGTGTCAC	AAAGCTAAAT	180
ACATGGAAAT	CGTTAATATC	GCTGATATTA	AGTAATTTCC	CCACTCTGAG	TGAATACTTT	240
GATGATTGCC	AACAGTGGCT	AATAAAATGA	CGGCTACCAC	ACTCATGGGT	CACTGGGGCT	300
GCGCAGGGCT	CTTTGAGGTG	GGTGGCTTCT	TTTGGAAAGT	ACTATGAACG	TCTCGAAGCA	360
GTATTCTAGT	GATAAGAATT	CTTAACATAG	CCAAGCGCCC	CACGTTTGTT	CCCCACGTTT	420
GTTCCCTTA	TCTCGAG					437

(2) INFORMATION FOR SEQ ID NO:337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

GAATTCGGCC	TTCATGGCCT	ACCAAACCCA	ATTTATTTAA	AAANATACTT	CTATATCATT	60
ATATGTATTA	CCAATTGTTT	TAGCCTTATA	CAGGATGCGG	TGTNCTGTGC	TCCTTNGTGA	120
ATGTCNGTTG	CTGGTAGCTG	GTTATGCTCA	TGATGATGAC	TGGGTGACC	CCACAGACAT	180
GCTTAACTAT	GATGCGGCTT	CAGGAACAAT	GAGAAAATCT	CAGGCAAAAT	ATGGTATTTT	240
AGGGGAAAAG	GATGTCAGTC	CTGACTTGTC	ATGTGCTGAT	GAAATATCAG	AATGTTATCA	300
CAAACTTGAT	TCTTTAACTT	ATAAGATTGA	TGAGTGTGAA	AAGAAAAAGA	GGGAAGACTA	360
TGAAAGTCAA	AGCAATCCTG	TTTTTAGGAG	ATACTTAAAT	AAGATTTTAA	TTGAAGCTGG	420
AAAGCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

GAATTCGGCC	TTCATGGCCT	AGAAATAGAT	TTTTCTCAG	ACTCTCATCT	CACATTCCTT	60
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TTTAAGATTT CCTNGTCCTA TCCCCACCCC AGACGTTTCC ATTTTGCTTT TATTTTCTAT 120
AATAATTCCT GGGGGCCTCT ATTAAAGGCC TTTTCTTTG ACTACTTACA TCCATTATAC 180
CAGTATCTTT GTCAGTAAAA TTTTATATAT CTTTATTCT GTCATCAGGT TAAGAAACAA 240
TAATTGTATT TTAAAGGAA AATATTTTAC GATGCTACTA AGCAGTTACT TTGTCCACTT 300
ATGCAGGATA CTCGAG 316

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

GAATTCGGCC TTCATGGCCT AGCTGGCTGG CACCTGGAGA ATCCCTGAGC TGGAAAAGCA 60
GCTTGGTCTG CAGAACTGAG TCACAAGACT GAGGCACTGG GGAGCCTCAG CCCCATCTGG 120
TTGTGNTCC CTCGTGACC TTGAGCTTGT CTTCCACTTG GTGCCGTAGG CCCTCATTG 180
TCCATTGAAG TTAGCACCTG TCCCTCCCGT CCTCCAGAGA GGTCAGGAGG ATAAGCATT 240
GAAGACTCAC TGTGTTTAT TGAGTGCTTA CTGTGCAGGT ACTGCTGTAG TTTTGTGCAA 300
CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

CAAACCTTTG AGTNNNACAG TTAAGATATT ATGTGAAGCT CAGAATCATG TTTCAGACCA 60
TTGAAATTAC TGGTTAAAT ACAATAGCT GAAGACATGA TGTAAGAT TAAGTACTTG 120
GTTTTGTAAC ATATTTACCA ATTAAAGTCA CAAAATATTT CTCATTATTT ATTCATGCAG 180
GTAACGTAGA AAAAGATAGT GCAGAAATCA ACTTTAAATA AAAAATTATT CCTCCCCTTC 240
CTCCCACTCC CCTATACTCT ACAAAATGTT TTCCCTGGGA CTAGGCCTTG AAAAGGCCAC 300
TACATATTAG TGTGACATGC ATTACTGTCT GCAATTAAAA AAGCTAACCT TGTGGTGATT 360
GTAATTACAT TATAAAAATG TCCACATGCA TAAATCTAAA AAAGGTTGAA AACCTACAGT 420
AAATCTACAA TATAGTGTTT ACATTTGACC ACTGGTTTGT GTTATGTAGA AGTCATAGAT 480
TTGGTAAAGC ATTGTAACAA TTTAGGAAGG CATCTAAATC TTAAAGTTCT GGACAAATTT 540
TATGTTTTAA TCTACAAAAT TGCATGAAGG CTAACCTCGAG 580

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

GAATTCAGAN TTNTGCTATG GTAGCACCAG ATGTCCAAAT TGAAGATGGG AAAGGAACCC	60
TCCTAATATC TTCCGAAGAG GGAGAGACGG AAGCTACTAA NTCACAAGAA GTTNTTCAGA	120
ATTTGGAATT AGAANTGGCA NCCGGCTTCA AGCAGATGAC TTCNTCCAGG ACTATACTTT	180
ATTGATCAAC ATCCTTCATA GTGAAGACCT AGGAAAGGAC GTTGAATTTG AAGTTGTTGG	240
TGATGCCCCG GAAAAAGTGG GGCCCAAACA AGCTGAAGAT GCTGCCAAAA GCATAACCAA	300
TGGCAGTGAT GATGGAGCTC AGCCCTCCAC CTCCACAGCT CAAGAGCAAG ATGACGTTCT	360
CATAGTTGAT TCGGATGAAG AAGATTCTTC AAATAATGCC GACGTCAGTG AAGAAGAGGG	420
AAGCCAGCTC GAG	433

(2) INFORMATION FOR SEQ ID NO:342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

GAATTCGGCC TTCATGGCCT AAAACTCTAA TAGTCTCTCT TCAGCGGAGC CACTGAAGGA	60
AGATAAGCCT GTCAGTGGTC CTAGGAACAA GACTGAAAAT GGACTGACTC CAAAGAAAAA	120
AATTCAGGTG AATTCAAAC CTTCAATTCA GCCCAAGCCT TTATTGCTTC CAGCAGCACC	180
CAAGACTCAA ACAAACCTCA GTGTTCCAGC AAAAACCATC ATTATTGAGA CAGTACCAAC	240
GCTTATGCCA TTGGCAAAGC AGCAACCAAT TATCAGTTTA CAACCTGCAC CCAAACCTGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:343:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

GATTCAGATG GAGATGCCAA GCAGGCCCTT AGGTGAAGGA GTCTGGAGTC TGAAAGCATT	60
TGGGATGGGG ATATAGACTT GAGAGCCATC AGCTTATAAA TAGGACTTGG TCAAGAATGG	120
GTGGCCTCCA TCCTAGATGG ATATAAATAA GAAATAAATA TCAATTTTTC TTCTTATAAC	180
ATTCTAGGT TTTCATTTT ATGACTTTAA GAAAAATATG AATGACAAAA ATAAAACATA	240
AAATCAAATA TATCCGTATT GCCCTTTGGG GGACACCATC TCTTGCTCAC TTACACAGT	300
AAGTGCCATT TCCTTCACCT CCATGGAAAA CATTTGTAATTACTAAGT TGAATAACTT	360
AAAATATAGG ACGGGACATC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GCAGAAACCT TCAGGGAAAC CCCATGCTAG CGGCAACTGC ACCACACTTT GAGGAGAGCT	60
GGGGGCAGAG ATGTCGTCGA CTCAGGAAAA ATACAGGGAA TCAAAAAGCT CTAGACAGTG	120
ATGCTGAGAG TTCCAAAAGT CAAGCAGAAG AAAAAATCCT AGGTCAGACT TATGCAGTTC	180
CCTATGAAGA CGATCATTAT GCAAAAGACC CAGACATTGA AGCACCCAGC AACCAGAAGT	240
CAAGTGAAAC GAATGAAAAG CCAACGACAG CTCTTGCCAA CACCTGTGGA GAGCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:345:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GCATTTGGTT CTTTTTATAT CTTCTATTTC TCTCACTATA TTCCTGTTTT TCTTTTAATG	60
CTTGACATC ATTAACTCG CTGTTATCCT TGTCTGTGAG TCATCTGGTC ATTTCTGTGT	120
GTTTTTATTA ACTGATTATT CTCCTTGTC TGGCCACATT TCTGTGCTTT TNGGCGTTTC	180
AGTAACCTCT GATTGGATGT TGGGTATTAT AAAGATTATA TTATTGAGTG TCTGGATTG	240
GGGTGGTAGT TACTTGTGGA TCAGTATGAT CCCTTTGAGG CCTATTTTGA AGCTTCAGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:346:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC TTCATGGCCT AGATTACAAC ACGTGTGCCA CCACACCTGG CTAATTTTTC	60
TATTTTTAGT AGAGACGAGG TTTCACCATG TTGACCAGGT TGGTGGTCTT GAATTCCTGG	120
CCTCCAGCCT GGTGACAGAG CGAGACTCCA TTTCAAAAAA AAAAAACAAA CTTCATGCTG	180
AGAAGTCTGA AGAAAAAAA GATTTTAAAG AGGAAATGT GTAAGAAAAA TACTTCAGCT	240
TCTGTTACAA AATCAAAATA GAAAAAACA CAAATTTGGT GTTTCCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:347:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GTAACCTTAG CTGTACCTTG CAAACCAGAA CATATGGTCA CCCTACCCTC CGGTCACTTT	60
TTCTTCTTTG TTTCCATTCT TTTAATTTT TTCCCTTTTA AACACACAGC ATTATCTTTC	120
CCTGAGCACC ATTGTCTTTG CAAATGCTCT TGCAATCGGG ATATTTTGA CCTGGCAACA	180
TGCATATTCA GTCTGAACAG TCTCTCTGAA CCTACCCCAA AACCTGGTTT TAGCTTCCAG	240

GCAGAAGACT CTGTTCCCTG GCTTGCAACC CCCAAACTCG AG

282

(2) INFORMATION FOR SEQ ID NO:348:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 342 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

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GAATTCGGCC TTCATGGCCT ATATCAATGC AATTTTAAAT TTTTGTTAAT ATCAACAGCA      60
AAAGCCTAGT GCATTGGGAG ATGTGCAACC TCCCTGAAAA TCTTTTCTGT TTCTGGAGTA      120
CTTCAGGGGT GGCCTCTGGC CCCAGAGCCT TTGCCACAGT GCTCCCACCA GCCCCACCT      180
CATCCGTCTG TTTGCAGAGC CTCACTACA GGTCCCCACG CTGCCTTCTT TACTCACTCT      240
GCGCTTGGCC GTTTTGTTAT TTGGCTTAGT CTACATTGGG CGGAAGTCTG TGTGCACAGA      300
GTGGGTGTTT CTTGAGCCC CTTCCTCA GAGGGCCACA CG                               342

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(2) INFORMATION FOR SEQ ID NO:349:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 442 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

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GAATTCGGCC TCATGGCCTA CAAAGAGCTG GGATTACTGG TGTGAGCCAC CGTGCCCGGC      60
CTGGACATCT GGTTTTAACT AGATGGAAGG GAAGAACATT ATGAATCTTT AAAATACGGC      120
TGTTGCCATT TTTCTCTCTT CTTAATATGC AGCATAGGTG ACAAGCTTTT CTGTCATCAT      180
CATGGAGCAT TCTGAATCAT GACATTTTGG TTGAGAGTT CATTCTTGAA TTTTCAGTTC      240
AAAATATTGT TTGAATATT ATTCCACATT CAAAGATTAT ATAAGGTCCT GTGCTTTTGA      300
ATCTTTTTC AAAAAATTTT TTCTGCCTGC TTAATAAAAA TACTTTTATT TCCCCACAGA      360
GAGTTCAGGA CTTGAGATTA GTTGTGTTC AGTCACTTA ACTGGATAGA CAATTTTGCG      420
TTTTGCAACA CCATAGCTCG AG                               442

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(2) INFORMATION FOR SEQ ID NO:350:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

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GAATTCGGCC AAAGAGGCCT AAAAAAATGA AATTCCTTAT CTTGCAATTT TTCGGTGGTG      60
TTCACCTTTT ATCCCTGTGC TCTGGGAAAG CTATATGCAA GAATGGCATC TCTAAGAGGA      120
CTTTTGAAGA AATAAAGAA GAAATAGCCA GCTGTGGAGA TGTGCTAAA GCAATCATCA      180
ACCTAGCTGT TTATGGTAAA GCCCAGAACA GATCCTATGA GCGATTGGCA CTTCTGGTTG      240
ATACTGTTGG ACCCAGACTG AGTGGCTCCA AGAACCTAGA AAAAGCCATC CAAATTATGT      300

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ACCAAAACCT CGAG

314

(2) INFORMATION FOR SEQ ID NO:351:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

GAATTCGGCC AAAGAGGCCT AGCTACCAGA GTGTGAGAGA CCATTGTCTC GTTGGCTGGC	60
GCTCAGGAC ATGCAGTCAC GGTAGCGGGA GCAATCACAA AACTGTAATT TACTTACCAA	120
ATCTCTTCCT TTCCGTAGCC TCGCCTGCCT GACTTAGAGA AAGAAAAGCA ATAATTTTAC	180
AGGCATTTTG AGGTGTCTCT TTGGGTTCTT TCTGTTTGAA AGGATATTTG TCGAAAAAAA	240
GAGCAAAACC GTTTTAAATA AACTCCCCCT GGAAAAAAC CCAAAACACT TGCATCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:352:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGGCC AAAGAGGCCT AGCAAATACA CATTAAATAAG AATGCCTAGA AGAGGACTGA	60
TTCTTCACAC CCGGACCCAC TGGTTGCTGT TGGGCCTTGC TTTGCTCTGC AGTTTGGTAT	120
TATTTATGTA CCTCCTGGAA TGTGCCCCC AGACTGATGG AAATGCATCT CTTCCTGGTG	180
TTGTTGGGGA AAATTATGGT AAAGAGTATT ATCAAGCCCT CCTACAGGAA CAAGAAGAAC	240
ATTATCAGAC CAGGGCAACC AGTCTGAAAC GCCAAATTGC CCAACTAAAA CAAGAATTAC	300
AAGAAATGAG TGAGAAGATG CGGTCACTGC AAGAAAGAAG GAATGTAGGG GCTAATGGCA	360
TAGGCTATCA GAGCAACAAA GAGCAAGCAC CTAGTGATCT TTTAGAGTTT CTTCATCCCC	420
AAATTGACAA AGCTGAGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:353:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCGGCC AAAGAGGCCT ATAGGCNTCT TTGGCCGGCC AAAGAGGCCT AAAAAAATCT	60
CAGCTATGGT TCATTATTAC TAGCTCAGCT TTTAATTCTT TAAATTGGTT GAATTATTCT	120
CTATGTCAGT TATTTTATT GACCAGTTT GGAATATTTT TGTTCAATTA TCAGGGAGTA	180
TGCGGTTAAT GAAGTTGTGG CAGGGATAAA AGAATACTTC AACGTAATGT TGGGTACCCA	240
GCTACTCTAT AAATTTGAGA GACCACAGTA TGCTGAAATT CTTGCAGATC ATCCCCATGC	300

ACCCATGTCC CAGGTGTATG GAGCGCCAAC TCGAG

335

(2) INFORMATION FOR SEQ ID NO:354:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 318 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GAATTCGGCC AAAGAGGCCT ACAGAGATTA TATTGGGGTT NCCATTTTGT GAAGCCANAG	60
ACATNTGGTC ATTGGGATGT GNGATTGCAG AATTATTTCT TGGANGCCCG NTNTACCCAG	120
GAGCCTNGGA GTATGCTCAG ATTCGANACA TTTCTCAGAN TCAAGNTTTN CCAGGAGNAC	180
AGTTGTTANA TNTGGGTACT AAATCCACAA GATTTTTTTG ACANAGAAAC AGATATGTCT	240
CNTTCTGGTT GGAGATTAAA GACACCGGAA GAGCATGNGG CAGAGACTGG AATGNAGTNT	300
TAAGAAGCCG GACTCGAG	318

(2) INFORMATION FOR SEQ ID NO:355:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCGGCC AAAGAGGCCT AGTGGGAATT TTAAATACAA GATCCTGTTG AAAATATTGA	60
TATTCAAAGA AACAAACAGC TTTGGATCCA TAGCCACAAT TAGGTTTTTC CTAGATTAAA	120
ATCAGAAGTG ATTTTATTGT TGGAAGATAC ATTAATTCTT TGAAGTCAGA ATAAGAGGCT	180
TGACAATTTA ATTTCTAATT AAGTGACTGA ATAGACAAAG GATCAAATAC AAACAGTAGT	240
GCAGGAAGAA AATAAATTGG AAGAAATAAT TGTTCACCA GTAGTAATAA TTAAGACCAC	300
CATTTTAAAA TTTTCTATAC ACAAAGAATG AGAAAATATT GTTATTATTA TTATACTTCT	360
TTCTTCTTCA GTATTAGTGG ACCCACATTA TCTCCTGTCA ATTCATTGTG TTTATNATGT	420
GAACCATCTC TCGAG	435

(2) INFORMATION FOR SEQ ID NO:356:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

GAATTCGGCC AAAGAGGCCT ACAGGCTCAC ATTGACTACA CACGTTTATA CCAGGCGCCA	60
TGTTCTTTGC CGAAACTCCC GCTCAGAGCC TGGATGATCT GCCCCTCACC TCTGCCCTCG	120
TTCCCATCCA CTCTCCCCTC CTGCTCTGT TCCTCGAG	158

(2) INFORMATION FOR SEQ ID NO:357:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```
GAATTCGGCC TTCAAGGCCT ACTCTTCTTG GCATATTATT TTCCTGAATT GCTGCCTCTG      60
TTGTTCAAAC CATCCCGGAT TAATGACAAA ACACTATCTT ATTCAAACCA AGAATTATCT      120
ACAACCCTCC TTCTCAACTA GTTTNNGCAA GATCATTTCA GTTTTCTTT TTGTGCTACA      180
TCCTGGATTA ATTCTCAGT TTNGTCTTCT CTGGAATCAC TACCTAAGGC TTATTCCATG      240
TTTCAAGTTT TTTGTTTTTT GTTTTTTTTT ACTTTGATGA GTATGTTTAC CAACGCTCTC      300
GAG                                                                                   303
```

(2) INFORMATION FOR SEQ ID NO:358:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 493 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```
GAATTCGGCC TTCATGGCCT ACAAAGTGTT GGAATTACAG GCGTGAACCT CCGTGCCCGAG      60
CCTTTTTTTT CATAGCAGTT TTATTAAGTT GTATTTGCCA TACCACCCAA TGTATCCATT      120
TAAGCACCTG ATTCAGTGGT TTTTCATGTA CTCATGGAGT TATGCAGCCA CAATCTTAGC      180
GCATTTTCAT TACCCAGAA AGAACTGTA CCCATTATGC ACCCCGTTCC CNTCNTCCGG      240
TCNTGGCAAC CACGAGTGTA CTGCTGTCTC TCATGGATTG GCCTATTCTC GACGTTTCAT      300
TGGGATGAAA TCACACAGTG TATGGCTTCC ACACCTTACT GTGCTGTTGT CAAGGTTTAT      360
CTATGTGTTG GGTGCAGCCA CCCCTTGTTA TCCACAGGGA TTGGACCCAG GAGCCTGCAC      420
CGATCCCCTG CAGGGATGCC TGTGTCCAC AGTGCCCCCT GCAAACTCA CTGATATGAA      480
GAGTCGGCTC GAG                                                                                   493
```

(2) INFORMATION FOR SEQ ID NO:359:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 420 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

```
GAATTCGGCC TTCATGGCCT AGTTAACATG ACACAAAATC TTTACCTGCA GTTCTAATAT      60
TTTGCAAGGC TGAAGTCCAT ATTTACAACG GTCTTAGATC ATCTCAATCT GATTATTTAA      120
CTATTCTCTC TAACTGCTAG TCCAGCCCCT AAAACTGCAT TTCTCTGCTC CTCCAAAGCT      180
TAGTGGCTTA TTGAAGTCCA TATTTGCATT GTGACAGAGC CAACTCCCAA GAATGGATTG      240
CCACTCAGTG TAATGCAATA GGAGCACTTT AATTTTATCT CCATTTTCTG GACCCAGTGC      300
ATCATTCTAG CCCTTTTTTC TTGGAATGAA GTCTGGCTGA GAATGATGAT CCATTAGTAA      360
GAATTACTTA ATAAATCAAC TCTTGTTTAT GAGTGGCAGA AAATAAAGC CAGGCTCGAG      420
```

(2) INFORMATION FOR SEQ ID NO:360:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 356 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

```

GAATTCGGCC TTCATGGCCT AATGTCACCA CTGTGGAAAA CCATATAGGT CGAAGGCTGG      60
ACTTGCATAT CACCTGAGGT CAGAGCATGG GCCTATATCC TTCTTTCCAG AGTCAGGACA      120
GCCAGAGTGC TTAAAGGAGA TGAACCTAGA GTCAAAGAGT GGGGGCCGAG TTCAGAGACG      180
TTCTGCCAAG ATAGCTGTAT ACCACCTACA GGAGCTGGCC TCTGCTGAAC TGGCCAAGGA      240
ATGGCCCAAG AGGAAGGTGC TTCAGGACCT GGTACCTGAT GATCGAAAGT TAAATATAC      300
TCGTCCAGGG CTCCTACCT TCAGCCAGGA AGTACTACAT AAATGGAAGA CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:361:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

```

GAATTCGGCC TTCATGGCCT ACATGATGAA ATGTTGGCTA AAAGAGTCAC CCTAATATTA      60
ATAAAATGTT TTATTCTTCA TGTGACTAAA TCAGTGTGCA TGCAAGAAAA AGAAAGAAAA      120
AATGCTTAGA TTCCTTTTTT AAATTATCTC CAGAATTTCT AATTTTTATA AATTAAGGAC      180
CAACAAATCC CATTITGTTT TCACGTTTGA CATTGTGTTCC TTTGACTTAA ATAACCTCTC      240
CACTCTTTAT TTTCTATTT GTGGTGATTT GAATAATTTT TCAGAAAATA TGTACTTTCT      300
GATAAATTGT AGTGTGTCAG TAATGAAAAC TGCTCTATGG TGCTCCCCTC GAG      353

```

(2) INFORMATION FOR SEQ ID NO:362:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 395 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GAATTCGGCC TTCATGGCCT ACGAACTACT CTAAGTAATG GGCCAAGTCA TGAGCTGCAC      60
AAAGCCCCC AAGACCCAGA CGGGTTTAAT GTTAAGCAAA ATGCCGCTG GTCTCAGGTA      120
GACACTCAGC CACCGCTAGC CCCAGTCAAC TGTCCCATGG GAAGGCAGAA GGCCCGGTGT      180
TGCCAGGTCT TAAGTTTTC AAGAGAAATC CTTAAACGAT GGTGTTTCAC TATAATGGAT      240
TCATTTTAT GTTTTATAAA TCTCTATGTT CATGTACTGG TATTAGTACT TTTATGTGAT      300
AAAATCTTT TTTTAAACAT TGGTAATTCA AAAACACAAC ACCCACATAC AGTGAGGACC      360
AAACAAACC CGTCTGCAAG CAGGCTCTCT CCGAG      395

```

(2) INFORMATION FOR SEQ ID NO:363:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```
GAATTCGGCC AAAGAGGCCT ACAAAGGACA GCCCTGTCTG CACACTGAGT TACTGTGGAT      60
TTTAAAGAAA CTTTCGCTAAA GAATTTAGGC ATTTCTGATT CAGTTAAAGG ATTGCCAATT      120
CATCAGTCCC TGAACTAGA GCAATCTCAA CAGGACAAGA AAAGAAAATG GGCTTTTTTAA      180
GTCCAATATA TGTCTTTTC TTCTGTTTG GAGTTAGAGT ATACTGCCAA TATGAAGCTT      240
AÇCGATGGGA TGACGATTAT GACCAAGAGC AAAATGTCTGA G                        281
```

(2) INFORMATION FOR SEQ ID NO:364:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```
GAATTCGGCC TTCATGGCCT AGTGCCACTG CACTCCAGCC TGGTGACAGA GTGAGNCTCC      60
GTCTCAAAAA AAAAAAAAAA AACTCAGCTT CTTAGAGAG ATAAAATTGG GGGAGGAGCC      120
CAGGGCCACA TACCAAGCTT TGGGACATGG TGCCTCATGC TCTCTGGGAT TGCAGACCAT      180
CCAGGTCTGT CTTGCCCCCT GTTAGTGAC ATATATCCAC TCACATGTCT TCCCTCAGGC      240
TATCGGGCAG GGGGACTTCA CCAGGGGGTT TATGGATAGG CTTCAAGAGG GTCTGTGAGC      300
CCCCAGAAAT TGTGTGTGAG ACTGAGTATG TGTTCTTTTT TCCAGGAAAT TCTCGAG      357
```

(2) INFORMATION FOR SEQ ID NO:365:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

```
GAATTCGGCC TTCATGGCCT ATTACAATAT GCTTAAAGCT CAAAATGATC GAGAAACACA      60
AAGTTTGGAT GTCATATTTA CTGAAAGACA AGCGAAAGAA AAACAAATCA GAAGTGTCGA      120
AGAAGAAATT GAACAGGAAA AACAAGCAAC AGATGACATT ATCAAAAATA TGTCTTTTGA      180
AAACCAAGTC AAGTACCTAG AGATGAAAAC CACAAATGAG AAAGTGTAC AGGAATTAGA      240
TACACTTCAA CAACAATTGG ATTCACAGAA CATGAAAAAA GAGAGCCTGG AAGCAGAAAT      300
AGCTCACTCC CAGGTGAAAC TCGAG                        325
```

(2) INFORMATION FOR SEQ ID NO:366:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 549 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

```
GAATTCGGCC TTCATGGCCT AGTGAATTGA GTTTGTAA CCTCCTTAGC ATATCACACA      60
ACACTAATTT TCCACTCTCA ATATGTGGCT GTAGAGTGTT TAATGTTTAC TTTCATATCG      120
CTTTTCCATA GTAGTGCAAG ACCTCAGTTT AGCTTGTTTA CATTATTTGC AGATTTACTT      180
ACAGTGTAAT ATTTATTTCT GTTTTAAATA GTGTTTGCAA TAGGAGAAAA TCATATGATC      240
TTAAGCATAT ACACCAAAGG TAAGAAAGGA AGCCACTATT GTATCTTTT GATGAATTCC      300
AGATGAGCTG GGATCAAATT GAACTGCTTA GGCAGAAATT TAAGAGACAA GTAGAAGTGG      360
TGCAGAAAGA CATTGTGACT GCAATGTCCT ATTTACAGCT ACTGCCCAGA GGAGAACACT      420
CCCAACATGA CAAAGAGTTC ATCAGCTTGA ATGTTAACTT TTGAAAACAA TTAATTGAGC      480
CACTGCACCC GGCCAATCTA GTGAATTGAG TTTTGTAAAC CTCCTTAGCA TATCACACAA      540
CTACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 481 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

```
GAATTCGGCC TTCATGGCCT AGGAGGCGGA GGTGTCAGTG AGCCGAGATC ACGCCATTGC      60
ACTCCAGCCT GGGCGACAAC AGCAAGACTC CATCTCAAAA AAAAAAAGTG AGATCCTGCC      120
GATGGGCCCT TCCTGTCCAC CTGTCAGGAA AACCTGCAAA AGGTTCTTGT CGCACCATTA      180
GAGCCAGTTT TTCCCAAATG ACACCCATAC CTGATTTTCC TTGTTCTTCT AAGACAGTTT      240
TAATTAGGAT AATCTCATAA GTGCTACATT TTCAGTGAAT TTTTCAATAT AGTGGCCCAT      300
GTTCTTTCTT TTTTTTTAAA GTCTTTTTC TCTGGTAGCA CATGTGATTT AATGCTTGCT      360
TTCCTGAATT GTAGAAATAA AAGGAAATCA CAAGTATTTT CCAACAAAGT GGAAGTGGG      420
CCGAAGGGTG CAGAAAAAAA CTATAGAAAT TAGTTAAAAA TTAGGAAGGG GCAGTCTCGA      480
G
```

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

```
GAATTCGGCC TTCATGGCCT ACCAACTCAG AAGGGAATGG AATGTGGAAA AAAAGAAAGA      60
AAACCTGAGT AACTTTTCTT AAAAAAGTCT AGCTGTTCTC AGTTTGTTGC ACCAAATGGG      120
GAGCAGGGAA TGTTCAGTC GCAACTGACT AATTAGCCCA ACCCTNATTT ATTGATAATA      180
ATAATGATAA ATAATAATGC TAGCTAACAC TTAGTGAACA AATACTAGGT ATTATGTGAA      240
ATCATTTTCT TGTATTAAT CACTTAATCT ACACAGCAAC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:369:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

```
GAATTGGCCT TCATGGCCTA NGTGTGGATA GTGGAGGCAT TGGTAGCCAG AACATGTCAC      60
TTTATGACAG CATATGGACA GCAATATGGA AGCCCAGCAT GGTGGGTAAA AAATGGGGCA      120
GCCTAAGGTC AATGACTTTT GGCTGAGTCT GTGAAGATCT CAAAGCTTGG TGGTTTTTAG      180
CATAGCCTTT ATACCATACT TAACTCCGGG TAAGGACCAG GACCACTGTA GCGACCAATT      240
GATTGACAGA GTAAAGTATG TGGGTTTTTT TTTCCCCCA ACTGGGCTGA TTCTCTTAGA      300
ATAAAAATTG TATACCATTA TATTATGTTA ACTTGATCAC AAAGAACAAA ATGTTATTTA      360
TTAATAATAT AGCATTGTCA TCTGTTTGAT GAATTTTCTT GATTTAATGC TTGTTTAGAT      420
TCAGTAAGCC ATTCTCAGGA ACTATAATAA ATGCTTCTTC CAACTTCTCG AG              472
```

(2) INFORMATION FOR SEQ ID NO:370:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

```
GAATTCGGCC TTCATGGCCT ACGAGTGCTT GCTGGAATCG TTTACCCTNG TTAATTTTTA      60
TCATNTCCTC TTTATGAGCA TGATATGGCT TCAGCTGTTC CACTTTGATC CAGGCATGAT      120
CTTCTGTTCC AAAAAATTTC ACAAAGAAGC ATTTCTTTCC GCGAGGTTTC TTCAAGTCCT      180
TTGGTGGATT AACAATCTTT CCTGGCCAAG GAGGATATCG GCCGAGTTTC CCCACACCA      240
AGTCGCCGAG CCGCAGACTC ACAGCCGCCA TCTTACCACC CAACCACCGC CGACGCACGG      300
GCCGCCG                                           307
```

(2) INFORMATION FOR SEQ ID NO:371:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 414 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

```
GAATTCGGCC TTCATGGCCT ACAACGATCT TGTCTTCTTC TATCAGGTTT GCGAAGGTGT      60
TGCGAAGGCC AGCCATGCCT CCCACACAGC TGCCAGGCT GGGCTTCCTG ACAAGCTTGT      120
GGCTCGTGGC AAGGAGGTCT CAGACTTGAT CCGCAGTGGA AAACCATCA AGCCTGTCAA      180
GGATTGCTA AAGAAGAACC AAATGGAAAA TTGCCAGACA TTAGTGGATA AGTTTATGAA      240
ACTGGATTG GAAGATCCTA ACCTGGACTT GAACGTTTTT ATGAGCCAGG AAGTGCTGCC      300
TGCTGCCACC AGCATCCTCT GAGAGTCCTT CCAGTGTCTT CCCCAGCCTC CTGAGACTCC      360
GGTGGGCTGC CATGCCCTCT TTGTTTCTT ATCTCCCTCA GACGCAAAC CGAG              414
```

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

GAATTCGGCC	AAAGAGGCCT	ACTGGATGGC	ATCTACTTCG	TATGACTATT	GCAGAGTGCC	60
CATGGAAGAC	GGGGATAAGC	GCTGTAAGCT	TCTGCTGGGG	ATAGGAATTC	TGGTGCTCCT	120
GANCATCGTG	ATTCTGGGGG	TGCCCTTGAT	TATTTTCACC	ATCAAGGCCA	ACANCGAGGC	180
CTGCCGGGAC	GGCCTTCGGG	CANTGATGGA	GTGTCGCAAT	GTCAACCCATT	TCCTGCAACA	240
AGAGCTGACC	GAGGCCCAGA	AGGGTTTCA	GGATGTGGAG	GCCCAGGCCG	CCACCTGCAA	300
CCACACTGTG	ATGGCCCNAA	TGGCTTCCCN	GGATGCAGAG	GAGGCCCAAG	GACAAAAGNA	360
AGTGAGGNAG	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GAATTCGGCC	AAAGAGGTCC	TGTAAGTATG	ACTATTTAAT	TTATTTCTTT	TCACAATATA	60
AAAAGCACAT	GCGATATTTT	GAAAGACTAT	TAAAGGTGGG	GACAAGAGGT	TATTTAAATC	120
TATGTTTGGG	TGCAACTTTT	ATGGCTTAAA	CTACAAAGAA	TTATCCTTTT	TATATATTAA	180
ATGATTGTAT	AGTTCTTTTA	ATACTGTTTT	TTGATACAAG	TGTGAAATNC	TTAAAGAAAA	240
TGGCAAACAT	CACTAACAAC	CATTACAATT	CTAATAGCTA	ACTTTTCTGA	GCCATTACTT	300
GGAACCATGC	ACTGTTTAAA	ATGCCTCACT	TGGCCAATGC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAATTCGGCC	AAAGAGGCCT	AAAATGCGGA	GTTATAATCC	AGAAGGGGAG	TCTTCAGGGA	60
GATACCGAGA	AGTAAGGGAT	GAAGATGACG	ATTGGTCCTC	TGATGAATTC	TGAAGATAAT	120
CTCCTAAATC	ACTGACGTTG	AGATGTCATC	ATCTTACATC	AGACTTTCTA	ACTAGTATCA	180
AGATCAGTGT	CAGATATTGT	TGAGGGAAGT	AATTTTATAA	AGTTACACAA	AGGTAGTTAT	240
AAAAAAGCC	CAGTTTGTCT	TTCAGAAGGT	GACTTTCATG	TGCTTGAAAA	GTTTAATATT	300
TGAATATTGT	GTTTAACCAC	ATGGTATTAA	AATTTTGCAA	TATATTGTGT	ATTGGTCTGA	360
TATTTTAGTA	TATAGTAGAA	CATACTTTTT	TTTCTTTTAA	GCCAAATGAA	AAGAGGTAAC	420
TTTGCTTTTT	TCCTTTTTCT	TACCTATCAA	ATAGCATTTA	TTACATGTCT	TTCAGTGAAA	480
TACTTAGTTG	TTCCAGGCAC	GCTCGAG				507

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GGAACGAATA GAAGTGTTTG TATCTGTGGG TTNGACACAC TACTGAATCA CAAAGTCTTT      60
GGAATAATTC TCAAAAGCCA TCACTTTTAG CCCACTTTCT CATTCAATTA TGCTCTATTC      120
TTTTTCTAGC ATGTCTAGCA GAATTCTCTT GAATTCTTGC AGTGAATTGG TGCTCCTTAA      180
ATACCTGCTA TTTTGAATA GTTTGACTT AAATACATTT TCCTTTTCTC CCAGTTGCAA      240
AATGTCAGGG CTGACAACCTG AAAGGGCTTC TGAAGATTGT CAGTGTTCTC ATATTCAGAT      300
AGGTAGCAAA GAATCTGACA CATTGTTTAT AATAAACCCA CTCGAG                        346

```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCGGCC TTCATGGCCT AGGATGAATG ACCTTAAAGA TCGAACATGA ATAAGAGACA      60
TCATTTACCC TCAAAGAAAC TAGAGTCTGA TTGGGCAGGG AGGAAAAGGT ATTTAAATTA      120
TGTCTTTCTG CATTGTGTGG ATTTGAAGTT TGTTTTTTGT TGTTAAGAGT CTTATTATTA      180
GGATAATGAC ACTGTTTTTT CTTTATTAAG TTACTTGTGT GGCAGTTAAG ATGATTCTGG      240
TGGCTCTTAA CATTTTTTTT TTCTCCAGTC GGGAACATGC CCTGTGTGCC GCCGTCATTT      300
CCACCTGCG GTTATTGAAG CATCTGCAGC TCCTTCTCT GAGCCTGATC CTGATGCCCC      360
ACGGTCTCGA G                                     371

```

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

```

GAATTCGGCC AAAGAGGCCT AGGAACTGTT CTGTTGAAAA TACCCATCCA ACAGTTTCTT      60
ACTATGCTCA TCCCAAGTG GCATCCTACA ATACCTACTA CCATAGCCCT CCTCACCTGC      120
CACCATATTG TGCTTATGAC TTTCAGCATT CCGGTGTCTT TCCATCCTCC CCTCCCTCTG      180
GACTTTCTGA TGAGCCCCAG TCTGCCTCTC CCTCACCCAG CTACATGTGG TCCTCAAGTG      240
CACCGCCCCA AACTCGAG                        258

```

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

```

GAATTCGGCC AAAGNGGCCT AATATAACTT AGCTGCTATT TACAACACTA GAAATTTAGT      60
ACTTTAAGTA ATTTACATC TATGATAACA TTTGTTACTT TATTTTAAAT GATTTTTTTA      120
CAGTAGTTAT GACAGTAGGA TGGTTATGGA ATTGGAATTT AAACCTCCCA CTAATGAGCT      180
TAAGCTGCTT GGAATATTAA TTATGTAGTT TTTACATTCC ATTTTAAAC AAAAAGCTTAG      240
NAAAGGTGCT GGCATTCTGA GGCCTGCAAT TAGGCCACAT AGCAGAAGCT TGCTCCTTCC      300
TTATCTGGGT GAAATATTTT ATTTTTCAC TTTGAGTCAT ATTTCCACCC CTGTATAAGC      360
TACATAGGAG CCTGAATGAA TTGGGTAGGA AAGGAAATTA TGCAAACAAG TCTCAGCTAG      420
TGCTGAATGA CTCGAG                                     436

```

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

```

GAATTCGGCC AAAGNNGCCT AGCACATGCG TCCCCGCAGT TGTCTCTTTC TCCTTTCCAA      60
GTTCTGNCT CTAAGGAGAT GGAAGTATTC TAAATTTTCC TACTTETAAT TTTTACTATG      120
CAACCAGCAA AGGCGGGAAG GTTGCAAGGA AAATTGTCCG GTCTTTCACA ACTAAGNNGG      180
AAATTAAGTT TCCTATGTTT TTATTCAAGA GTTGCTTTTA AAACCTGCCTG CCGGCTTTCC      240
CTTTTAAGTT TTAGGATTAT AGTTAAGGTT ATGGAAAGTA GTCATTCATT AGTTCAGTAC      300
GTTTCATATA GTTCTCTAAC ATAGAAGAAA ACTCAGTCAC CAGACAGTGA AGTCATTTAG      360
CAGTGTTTAT TGGAAGATAA TCCACAGTGA TGGTAATGGA ATACTGGAAG CNCATCCTAA      420
ATAATCTGTA ATTATTATTA TTATTATTTT GGGACAGNGC GAGGCTCCGT CTCCAAAAAT      480
AATAAATAA AATAAATAA TAAATAAATA AATAAAGGAT GGTGCACGTC TCGAG          535

```

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GAATTCTAGN CTGCCTCGN GTCGCACCCA TGTTCAATCG TTCCTTCCTT CCTTCCTACA      60
TTCTTTTTTT TTNCCTTCTT CTTCAGGGTC TCACTCTGTC ACCCTGGCTC GAG          113

```

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 660 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GAATTCGGCC AAAGAGGCCT ACACACATCG TTCATGTACA TGATCGCCGG ACTCTGCATG      60
CTGAAGCTCT ACCACAAGCG GCACCCGGAC ATCNACGCCA GCGCCTACAG TGCCTACGCC      120
TGCCTGGCCA TTGTCATCTT CTTCTCTGTG CTGGGCGTGG TCTTTGGCAA AGGGAACACG      180
GCGTTCTGGA TCGTCTTCTC CATCATTCAC ATCATCGCCA CCCTGCTCCT CAGCACGCAG      240
CTCTATTACA TGGGCCGGTG GAAACTGGAC TCGGGGATCT TCCGCCGCAT CCTCCACGTG      300
CTCTACACAG ACTGCATCCG GCACTGCAGC GGGCCGCTCT ACGTGGGACC GATGGTGCTG      360
CTGGTCATGG GCAACGTCA1 CAACTGGTCG CTGGCTGCCT ATGGGCTTAT CATGCGCCCC      420
AATGATTTTC CTTCTACTTT GTTGCCATT GGCATCTGCA ACCTGCTCCT TTACTTCGCC      480
TTCTACATCA TCATGAAGCT CCGGAGTGGG GAGAGGATCA AGCTCATCCC CCTGCTCTGC      540
ATCGTTTGCA CCTCCGTGGT CTGGGGCTTC GCGCTCTTCT TCTTCTTCCA GGGACTCAGC      600
ACCTGGCAGA AAACCCCTGC AGAGTCGAGG GAGACAACC GGGACTGCAT ACCCCTCGAG      660

```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC AAAGAGGCCT AGTGTGGGA GCTGTGGGCT GTGCCCTTCC AGTCCCCCAC      60
AGCAGTGCTG TTGCCAAGA ATCTCCTAGC GAGAGACCAG GGGCTACTGC CAGGTGACAG      120
AAAAGGGAAC ATCAGTTCCG CTATACCCAC AGCTCACCTG GCGGCCTGGG GCCTGCACAG      180
GGCCTGGTTG AGGCAGTGGA CCCCATTTT GGGCCGTCTG TGGAGTTGAT GTTCTGCCA      240
GCTGGTCCCT CTCTGTCTT CCTGGAATT CACCTGCAGT TTGATGCCTG AGTTAA1AATT      300
GTTCTTCTAA ATAATTCAC GTAGACTTTC TGTTTTTAGC TATGTGAAAA CTTCTGAGAA      360
ACTTGAGAG TCTCGAG                                     377

```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAATTCGGCC TTCATGGCCT ACTGGGCGGT CTTTGACGCA ATAACAATAT CTGCTCCATC      60
CTTTGCTGCT TTCAATGCAA TAGCTTTGCC AATGCCACGG CTTGCACCTG TGATA1AAAAAC      120
TGTACATCCT GCCAGCCTCC CGGTGTTGGG TAACATGACT TTCGTAGATC AGAGGAGGCG      180
GCGGGCGAAG CGCACGTCGA GCGGGGGAGC GGCCTGCCT GTGGAGATCC GCGGAGGCCG      240
ACAGGATTCG TTGGCTGCCG TCCCCGCTGC TGTGCATTGG GTTAAAAACG ACAACCAACT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:384:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

```
GAATTCGGCC AAAGAGGCCT ACTTATTTTA CACAGCTTGA TTAAGGTCTA TGTCGGTATA      60
ATTTTTTTTA TGAGTCTNAC ACGTGGGATT TGTTGAGCTT CTTGAATTTG TATGTTTATA      120
CAAATTTAGG AATTTTTC ATCCATTATT TATTTGAATA TATTCTCTGT CTTCACTGTC      180
CTTTGAGGAC TCCAATTACG CATATACCTA ATTGCCTGGA GTTGTCCCAT AGCTTACTGA      240
TGCTTTGCTT ATTTTTCCT TTCTTTTCT CTCACCATGC TTTAGTTAGG ATAGTTTTTA      300
TACTGTTTT TTAAAGTTTG CTAATCTTT CTTNCAGCAT GCCAGCTCGA G      351
```

(2) INFORMATION FOR SEQ ID NO:385:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

```
GAATTCGGCC AAAGAGGCCT AGCGTCTTGG ACATGCCAGG AATAAAAAGG ATACTCACTG      60
TTACCATTCT GGCTCTCTGT CTTCCAAGCC CTGGGAATGC ACAGGCACAG TGCACGAATG      120
GCTTTGACCT GGATCGCCAG TCAGGACAGT GTTAGATAT TGATGAATGC CGAACCATCC      180
CCGAGGCCCT CCGAGGAGAC ATGATGTGTG TTAACCAAAA TGGCGGGTAT TTATGCATTC      240
CCCGGACAAA CCCTGTGTAT CGAGGGCCCT ACTCGAACCC CTACTCGACC CCCTACTCAG      300
GTCCGTACCC AGCAGCTGCC CCACCACTCT CAGCTCCAAA CTATCCCACA TATCTCGAG      359
```

(2) INFORMATION FOR SEQ ID NO:386:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

```
GAATTCGGCC AAAGAGGCCT ACTACATGTA AAACACTTTT ATTCATTAA AAGAAAAC TG      60
ACTGGCTTGG ACCTACAAAT TAGTTTCATT ATTTGTTAAT GTTTGAAAGC CATTAAAAGA      120
TGAATATTAA GGTTCCTTA TACTCAATAC TTGTAGTTT GTTTGGGGGA ATGAGAGGAT      180
GCCCTTGGTA CCTTGTGAG GCCTCTCCAC TGAGGGTCAA TCATGACTTC TGTTTTAAAC      240
CAGCCCATCC CATCTTCTCC AGCTGCTCTC CTTATGTCTT GCTTCTCTCC CCTCCAACCT      300
TCTCAGCACC AGGACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:387:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

```
GAATTCGGCC TTCATGGCCT AGTGGGAGCT ATTTTCTTTT TTGTGCATAT AGATATTTCT    60
TAAATGAAGC TGCTTTCTTG TCTTTTATTT CTAAAAGCCC CCTTATACCC CACTTTGTGC    120
AGCAAAGATC CCCGTGCAGG TCACAGCCTG ATTTGTGGCC AGGCTGGACA AATTCCTGAG    180
GCACAACTTG GCTTCAGTTC AGATTTC AAG CTGTGTTGGT GTTGGGACCA GCAGAAGGCA    240
AACGTCCAGC CAACACACAG GACTGCAAGA GGTCTCGAG    279
```

(2) INFORMATION FOR SEQ ID NO:388:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

```
GGTAGAAGCA GGAGGTTTTC AACCTAGTCA CAGAGCAGCA CCTACCCCT CCTCCTTTCC    60
ACACCTGCAA ACTCTTTTAC TTGGGCTGAA TATTTAGTGT AATTACATCT CAGCTTTGAG    120
GGCTCCTGTG GCAAATTCCC GGATTAAAAG GTTCCCTGGT TGINAAAATA CATGAGATAA    180
ATCATGAAGG CCACTATCAT CCTCCTTCTG CTTGCACAAG TTTCTGGGC TGGACCGTTT    240
CAACAGAGGC TCGAG    255
```

(2) INFORMATION FOR SEQ ID NO:389:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 282 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

```
GAATTCGGCC TTCATGGCCT AGGCCACAT AGAAGAAATG AATGAAAAGA CTTTAGAAAA    60
GCTTGATGTG AAGCAAACAG AACTAGAATC ATTATCTTCT GAACTGTCAG AAGTATTAAA    120
AGCCCGTCAC AAAC TAGAAG AGGAACTTTC TGTTC TGAAA GATCAAPCAG ATAAAATGAA    180
GCAGGAATTA GAGGCCAAGA TGGATGAACA GAAAAATCAT CACCAGCAGC AAGTTGACAG    240
TATCATTTAA GAACACGAGG TATCTATCAA GAGGAACTCG AG    282
```

(2) INFORMATION FOR SEQ ID NO:390:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```

GAATTCGGCC TTCATGGCCT AGATAGAGCT CAAAAACATG GCATGGATGA ATTTATCTCT    60
TCCAACCCCT GTAACTTTGA CCACGCTTCC CTCTTTGAGA TGGTACAACG CCTTACTTTG    120
GATCACAGAC TTAATGATTC CTATTCTTGC CTGGGCTGGT TCAGTCCTGG CCAGGTGTTT    180
GTACTAGACG AGTATTGCGC CCGAAATGGA GTCGGGGGGT GTCACCGACA TCTCTGCTAC    240
CTCAGAGACT TGCTTGAACG GGCAGAAAAT GGCGCCATGA TCGACCCAC CCTTCTTCAC    300
TACAGCTTTG CTTTCTGTGC ATCCCATGTC CATGGGAACA GTCAACAAAT GCATGTGTAC    360
CTTAGTGGGC TGCCACCAA TACAGACCAC GGTCTTCCC TATAGTGAGT CGTATTAATT    420
TCAGAGGAGT ATTTAGAAGA GAAGCTGAAG CTGTCCGAG    458

```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 366 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```

GAATGGGACT CCAAGCCTGC CTCCTAGGGC TCTTTGCCCT CATCCTCTCT GGCAAATGCA    60
GTTACAGCCC GGAGCCAGAG GAGCGGAGGA CGCTGCCCCC AGGCTGGGTG TCCCTGGGCC    120
GTGCGGACCC TGAGGAAGAG CTGAGTCTCA CTTTGGCCCT GAGACAGCAG AATGTGGAAA    180
GACTCTCGGA GCTGGTGCGG GCTGTGTCGG ATCCCAGCTC TCCTCAATAC GGAAAAATACC    240
TGACCCTAGA GAATGTGGCT GATCTGGTGA GGCCATCCCC ACTGACCCTC CACCTCGAGG    300
TTCTCCCTAT AGTGAGTCGT ATTAATTTTC AGAGGAGTAT TTAGAAGAGA AGCTGAAGCT    360
GTCGAG    366

```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 523 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```

GGCGGGTGGG GGTTAATTAT CTGAAACCTA CTAAACGGA CTACAGTTAT CTCTAGGCAA    60
TGCTGTTGGA GTGTTTCCTG CAAATGCATT TCACTCATTT TTTTGTGATT ATTTTATAAG    120
TATACTGGGG CAAAAATTTT ACATTCTAAA TTGTTCTTAT TTATTATTTT TATTATAGAT    180
ATATGAGGAT ATTACTTACT CTATTACACA TATAATTTAT CTTTAAATTT TTCAAGTGAG    240
TTCTACAATT AACTTTATCA TCTAAATTCT CATTACAGAT AGCATTTTAA TGTCCAGAAA    300
GAAAAAAGG TTTTATTATG TTATATGTGA AACCATAAAA ATATTACCAG CTTGTGGCCG    360
GGCGTGGTGG CTCACGCCTA TAATCCCAGC ACTTTGGGAG GCCGAATCAC CTGAGGTCAG    420
GAGTTCAAGA CCAGCCTGGC CAACATGCGG AAACCCCGTC TCTACAAAAA TGGAAAAATT    480
AGCCCGCAT GATGGCAGGT GCCTGTAATC CCAGCTACTC GAG    523

```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 548 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GAATTCGGCC	TTCATGGCCT	ACCCAGATGA	AACTTTTGGG	GGGAGAGTGC	CCAGACCAGC	60
CTTTGTCCAC	TATGACAAGG	AGGAGGCATC	TGATGTGGAG	ATCTCCTTGG	AAAGTGA CTC	120
TGATGACAGC	GTGGTGATCG	TGCCCGAGGG	GCTTCCCCC	CTGCCACCCC	CACCACCCTC	180
AGGTGCCACA	CCACCCCTA	TAGCCCCAC	TGGGCCACCA	ACAGCCTCCC	CTCCTGTGCC	240
AGCGAAGGAG	GAGCCTGAAG	AACTTCCTGC	AGCCCCAGGG	CCTCTCCCCG	CACCCCCACC	300
TCCGCCGCCG	CCTGTTCTTG	GTCTGTGAC	GCTCCCTCCA	CCCCAGTTGG	TCCCTGAAGG	360
GACTCCTGGT	GGGGGAGGAC	CCCCAGCCCT	GGAAGAGGAT	TTGACAGTTA	TTAATATCAA	420
CAGCAGTGAT	GAAGAGGAGG	AGGAAGAGGA	AGAAGAGGAA	GAAGAAGAAG	AGGAAGAAGA	480
GGAAGAGGAG	GAAGACTTTG	AGGAAGAGGA	AGAGGATGAA	GAGGAATATT	TTGAAGGGGT	540
TACTCGAG						548

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 577 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCGGCC	TTCATGGCCT	ACTTACTAGG	AATTAAAAGA	CGGATTTCTGA	AGGAGATTCA	60
GAGGCAGCAA	GCACTACAGA	AGTCAGAACT	CCAGCACCAT	CTGCTCCGTT	TCTTGAAGTT	120
TGCTGAACGA	GGA CTACAG	CTGCAACGTG	GGGTGATTGT	ATTGATCAAA	ACCCACTGGG	180
AAGGACAAAG	AGTTTGCCGC	CTTTCGGGGA	TCCAAGGGAC	TGTGGCGACC	GTGCCTCTGT	240
GCCAGCGTCC	CAGGAAGGAA	GCCAACCCTG	AGCGAGCCTG	TCCTCTGTGG	CAGGTCCACA	300
CGGTGTGGGT	GGGCAGGGCT	TGGACCCCG	TCTCCATGGC	AGGTCCATAC	AGCATGGGTG	360
GCAGGGTTTG	GACCCGCCCA	GCAGCACCA	GGACCCAGC	CACTCTCGGG	GGCAGACGTC	420
AGAATCCGTT	CCTGAGCAGC	TCCCGTGCCC	TGGGGGCAGT	CACAGAGCCC	CCCAACACCC	480
CCGTGCTCTG	CACCAGCCTC	TCCCTCCACA	CCCGAAGCAG	GCGTCCATCT	GTGTCCTCTT	540
GGCAGCCCCT	CAAACACACA	CCACCCCAT	TCTCGAG			577

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 415 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCGGCC	TTCATGGCCT	ACATCTTCAT	TGCTGAGGTT	GCAGCTGCTG	TGGTCGCCTT	60
GGTGTAACAC	ACAATGGCTG	AGCACTTCCT	GACGTTGCTG	GTA GTGCCTG	CCATCAAGAA	120
AGATTATGGT	TCCAGGAAG	ACTTCACTCA	AGTGTTGGAAC	ACCACCATGA	AAGGGCTCAA	180
GTGCTGTGGC	TTACCAAACT	ATACGGATTT	TGAGGACTCA	CCCTACTTCA	AAGAGAACAG	240
TGCCTTTCCC	CCATTCTGTT	GCAATGACAA	CGTCACCAAC	ACAGCCAATG	AAACCTGCAC	300

CAAGCAAAAG GCTCACGACC AAAAAGTAGA GGGTTGCTTC AATCAGCTTT TGTATGACAT	360
CCGAACATAAT GCAGTCACCG TGGGTGGTGT GGCAGCTGGA ATTGGGGGCC TCGAG	415

(2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC TTCATGGCCT ACTAAAAGAT ACTTCAAAGT GACAAAAACG TGTCCTTCC	60
CCACTTAGAG ACAATGATTA ACAGGGCCCT ATATGTTCTT ACCACATACA GAGGATGCAT	120
TTATTTTGGC TCTATGACAC TTGCAAAAAT CTCTACTGTA ATTAATTTGG GTCTATTATT	180
AACTCTCTGT TCCATCATAG AATGTGGCCA GGCCTTACAA TGGAGAGCCA GAGTTAAAC	240
TTCAAGTTGC ATCTGTTTTT GGGCTGAGTC ACCACCGGAC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:397:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 208 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC AAAGAGGCCT AAAAATGAAA ACCTCTGCAC TTTAATTTTT TTCAGTAATT	60
TCCAGCTATT TCTAGGTATA AAGAGCAGCT CGTTTCTCTT ATTTATTTTA GTCTCATGTG	120
TCAATACTTT CCGATGCTTT GCTTAATTCA TGTATGTGTG CAGTGCTGCA ATGCCCAGAC	180
AAACGTGAGC ACACCCACCA ATCTCGAG	208

(2) INFORMATION FOR SEQ ID NO:398:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 452 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC AAAGAGGCCT ATGATGAAGC TGGGCATTTA TAACTAGATT CATTAAAGGAA	60
TACAAAGAAA ATACTTAAAG GGATCAATAA TGGTGTCTTC TGTTGTCAGA ATGCGAAGTC	120
TGTGGTTTAT CATTGTAATC AGCTTCTTAC CAAATACAGA AGGTTTCAGC AGAGCAGCTT	180
TACCATTTGG GCTGGTGAGG CGAGAATTAT CCTGTGAAGG TTATTCTATA GATCTGCGAT	240
GCCCCGGCAG TGATGTCATC ATGATTGAGA GCGCTAACTA TGGTCGGACG GATGACAAGA	300
TTTGTGATGC TGACCCATT CAGATGGAGA ATACAGACTG CTACCTCCCC GATGCCTTCA	360
AAATTATGAC TCAAAGGTGC AACAATCGAA CACAGTGTAT AGTAGTTACT GGGTCAGATG	420
TGTTTCCTGA TCCATGTCCT GGAACGCTCG AG	452

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC AAAGAGGCCT ATCTTCCTGA AGAGCAATGG AGCCGCTTTT ACTTGAAGA      60
GGACTAATCG TATATCTAAT GTTCCTCCTG TTAAAATTCT CAAAAGCAAT TGAAATACCA      120
TCTTCAGTTC AACAGGTTCC AACAATCATA AAACAGTCAA AAGTCCAAGT TGCCTTTCCC      180
TTCGATGAGT ATTTTCAAAT TGAATGTGAA GCTAAAGGAA ATCCAGAACC AACATTTTCG      240
TGGACTAAGG ATGGCAACCC TTTTATTTC ACTGACCATC GGATAATTCC ATCGAACAAT      300
TCAGGAACAT TCAGGATTCA CAACTCGAG                                     330

```

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT AAGCAAACCC AGAGGTGGAT GTTATGAACA GCTGTGTCTG      60
CCAAACACAT TTACCCTTTG GCCCCACTTT GAAGGGCAAG AAATGGCGTC TGCTCTGGTG      120
GCTTAAGTGA GCAGAACAGG TAGTATTACA CCACCGGCCC CCTCCCCCA GACTCTTTT      180
TTGAGTGACA GCTTCTGGG ATGTCACAGT CCAACCAGAA ACACCCCTCT GTCTAGGACT      240
GCAGTGTGGA GTTACCTTG GAAGGGCGTT CTAGGTAGGA AGAGCCCGCA GGGCCATGCA      300
GACCTCATGC CCAGCTCTCT GACGCTTGTG ACAGTGCCTC TTCCAGTGAA CATTCCCAGC      360
CCAGCCCCAT CCTCGAG                                     377

```

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGGCAAGGTC TTCGGCTCGT GCCGTTCTAA GCCGGAGAAT      60
TCTCGCGGGA GCAGGGTTAC GTCCTCGTGG GATTTCGTTGG CGGTGGCTGA GGTCCTCCAG      120
CAGCCTGACC TGAGTGGGTT AGTGATCCAG AGAAACCAGC AGGCCAAGT GGTCAGGAAG      180
GTTCCGGAAG CTGTTGGAGC AGTGTGGGGA ATTTCCCACC AGGATGAGTA TGATTGGCTG      240
TGATTTTAGA TCGTAAAGCT GAAAATTGAA ATCATGAAAG TAGACAGGAC TAAACTGAAG      300
AAGAACTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:402:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

GCATTGATGG	AAAAGCATAA	TGTCTTAGAA	AAAGGCTTTC	TAAAAGAAAA	AGAGCAAGAG	60
GCCATTTCTT	TTCAAGATAG	ATACAAAGAA	CTTCAGGAAA	AACATAACA	AGAATTGGAA	120
GACATGAGGA	AAGCTGGTCA	CGAAGCCCTC	AGCATTATTG	TGGATGAATA	TAAGGCACTA	180
CTGCAGTCTT	CAGTTAAGCA	ACAAGTAGAA	GCTATTGAAA	AACAGTACAT	TTCTGCAATT	240
GAGAAACAGG	CACACAAGTG	TGAGGAGTTG	CTAAATGCTC	AGCATCAGAG	GCTCCTTGAA	300
GTGCTAGATA	CAGAGAAGGA	ACTGTTAAAA	GAAAAAATAA	AGGAAGCCCA	TCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:403:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 492 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GTTCTAGACC	TGCCTCGAGC	GTTAATGGTA	TAAATCACTT	GTTTGTAAG	TATTGTTTTT	60
AAATATTGCC	AGATTGATA	TCTTAGTATT	GTATTTTAT	ATTTGCTTC	ATGTGTTTTT	120
GTTTTCTCAT	AAGTGTCTGT	ACCCCCCTTT	TTTTTCTTT	AAAGAGAAAT	AATGAGAGAG	180
ATTGTCTGTC	TTGAAGTTCT	CAGTGCCTGT	GCATTGCTGC	CACTACACAG	CTAGTATCAT	240
GACAGCAGCT	TCAGAACCAG	AGCTGGCTTC	CAGGCAAGGC	TGGGTGGGA	AGAAAAGAGAA	300
AAACAAAAGA	ATTATTTCTC	TATGCCGAGA	CCAGCTCGGT	CAGGGAGACC	CTAACCTAGC	360
GGTGCTAGAG	GAATTAAAGA	CATAGACACA	GAAATATAGA	GGTGTGAAGT	GGGAAATCAG	420
GGGTCTCACA	GCCTTCAGAG	CTCAGCCACG	AACAGAGATT	TACCCACGTA	TTTATTAACA	480
GCAAGACTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:404:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 395 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAATTCGGCC	TTCATGGCCT	ACTTCCCTCT	AAGGTCCCCA	AATGCCTCTC	ACGTGCCTAG	60
CATTTAGCTG	CTGCACCGAG	CATGCTCACT	GACAACTTT	TGGCCAAGAA	GAGCCTTTTG	120
GTCTCTCTTG	GTCAGATCTA	GGAGGGCTTC	AGGACTCTCC	AAAACCTACC	CACTCAGAGA	180
GCCTGCCAGG	AACACTCAGC	TGAGCGATGG	CATTGTGGAG	CCTGGGTTTT	CAGAAGGGAG	240
CCCATAGTGA	GTGGTAGCAT	AACCTTGTTA	AGGTTGTATT	TTCTTAGAT	ATAGAAACAA	300
ATCAAATGCT	GCTAAATTGG	TAAGGGATGG	AGTTTTTATA	TCACGTCACA	TTTTGCTGAG	360
CCGTAACCAG	ACAGGGAAAA	AGCAGAGACC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:405:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

```

GAATTCGGCC TTCATGGCCT ACCAAGTTCT AACTGTAAAA TGGGGACATT TTACCTTTCT      60
TTCTTTGGAT AGGATCAGTT CTTAAGAGCA GCCCCGGTAA CTGGAGGAAT GGGAGCCGTT      120
TTGATGAGAA AAATGGGCTG GAGAGAAGGA GAAGGATTAG GAAAAACAA AGAAGGCAAT      180
AAGGAACCCA TCCTAGTTGA TTTTAAGACA GACCGAAAAG GTCTTGTTGC AGTAGGAGAA      240
AGAGCACAAA AGAGGCCTCG AG                                     262

```

(2) INFORMATION FOR SEQ ID NO:406:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```

GAATTCGGCC TTCATGGCCT ACCCATTTGT CAATTTTTGC TTGTTGCAA TTGCTTTTGG      60
TGCCTTTGTC ATGAAACCTT TGCCTACAGG TGCTGTTTAT TTACACCCCT GTCCCAACCT      120
CACCCCACTC CTTTCTTTT GCTGGTGGGA AGTCAGTAAG AACTGTGGGT GGGGTTCTGA      180
GGTAATCAAT ACAAAGAAGA AGGTAAGAAA TTGGAGGGGA CTCAGGGGAG ATGGCAATGC      240
TGACAAGGGG TTGGATGGAA TTTGTTCTGT AAAGTGAAG CAGCTCGAG                                     289

```

(2) INFORMATION FOR SEQ ID NO:407:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```

GCTCCTTCTG TATCCTTCCT TTCCCATCTG TCTGCTTCTA ACAAATAAGA CAAGCTAAGA      60
AGCAGCTTGT TTCATGATTC TATACTCACT TCCAAGCTTT CTCTGCATAG ACTTTCCTAG      120
TTTGCCACTT TATCTTTTCT CCATCCCTCC AGCCAGTCAT GAGATTCTAC TCCCCATTCA      180
TACATGCATT TATTTATCCA GACTTTACTG AAGGCTTACT CTTTGAACTT TGCAAAATGC      240
CAGTGAGGCA AAGCATGCAT CCTGTACAGG AAAAAGTCTAG TCTAGAGGGG AGAGATAAGC      300
AAACAAGTGA TTACCACACC AGGCTCGAG                                     329

```

(2) INFORMATION FOR SEQ ID NO:408:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 222 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

ATTGAATTCT AGACCTGCCT CGAGAGCTTT TGAGATTGTC TATTTTGTCT GAGTGAGTTT	60
TGGTACTTTA TTGTTTTCGA TTGGTCCATT TCTTCTACGT TGTGAGATCT CTGAGTGTCA	120
AGTTGTTTCA AGTACTCCGT TATTATCTTT TTCATGACTG TAGGATCTGT GGTGATATTG	180
ATGATTGTGT TCTTCACTCC TTTTGTGTGG CCTACACTCG AG	222

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 505 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC TTCATGGCCT AAACCTGCAG AAATGAAGAC TAGAGTACAC AGCACACTCA	60
GAGCCCAGAC AGACTTCGTC CCAGGACATC ATCTGTTCTT GATGCCCATT CTCTCTCCT	120
AAACATCATT TACTTTTTCC TCTAAAAGTG CCTGCAGACC CCCACTACTC TCTCCCATGG	180
AGAAGGGCAT ATAAGCTTCG AATCTCACGG GGTATTGGG CACTCTGTCT CTGTGATGC	240
TCCTATGCAT GTAATAAATT TATGTGTCCT TTCTCTATT AATTGGTCTA ATGTCCATTT	300
ATTCCATAGA TTCAATTATC AAACCTCAG AGGGCAGAGG GAAAATTTTC ACTCCCTTAT	360
ATCATCAGAA ATATAAATAA AAATAGCACA AACTCAGTA AATGATTATG TTATTATTGT	420
TATGTTTGTA ATATCTTGGT GTCTGGTTAT TTAAATCAT ATCACTTAA GAAACAGTGT	480
TCCTTAGGCC ATGAAGGCCG AATTG	505

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 650 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

GTATGAACAT TGAGGGCCCA GATCTCAATG TGGAAGGTCC GGAGGGAGGC TTGAAAGGTC	60
CCAAATTCAA GATGCCTGAC ATGAATATCA AAGCTCCCAA GATCTCCATG CCTGACATTG	120
ACTTAACTT GAAAGGCCCC AAGGTGAAAG GTGATGTGGA TATTTCTCTT CCCAACTTG	180
AAGGGGATCT GAAAGGGCCA GAGGTTGATA TCAAAGGCC TAAAGTGGAC ATCAATGCCC	240
CAGATGTGGA TGTTTCATGGT CCAGACTGGC ATCTGAAGAT GGGCAAAGTG AAAATGCCCA	300
AGTTCAGCAT GCCTGGCTTC AAAGGAGAAG GCCCTGAAGT CGATGTTACC CTCCCTAAAG	360
CTGACATTGA CATTCTGGT CCCAATGTAG ACGTTGATGT TCCAGACGTG AATATTGAAG	420
GTCCAGATGC AAAGCTGAAG GGCCCCAAGT TCAAGATGCC TGAGATGAAC ATCAAAGCCC	480
CCAAGATCTC CATGCCTGAC TTTGACCTGA ACTTGAAGGG ACCCAAATG AAGGTGATG	540
TGTTGTGTG TTTGCCCAA GTGGAAGGTG ATCTAAAAG CCCTGAGGTG GACATCAAGG	600
GGCCCAAAGT GGACATTGAC ACTCCTGACA TTAACATCAA GAGGCTCGAG	650

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```

GAATTCGGCC TTCATGGCCT AGGGGCTGGA GGGTGGCCCG AAGCAGATGG GGCCGGCCTT      60
GCAGGCACTT CTAAGGCCTT GGGGTTTGCT TCCGAGGGAG TAGGGAAGGA GAGCGATGTC      120
ACCCTGTGAG GCTTGGTCAC ATACCCCAAT GGATTTGGTA GCACACGCCA CAGTGAAGGT      180
ATAAGCTACT GTCATCACAC GTAATTATTT CATGAAACAG AAAATTTTAA AATAAAAGAA      240
AATAGAAGTT TCCCTATTTT CTTCTCCTGC ACTATTGGAT CATCCTGTTT AGCCCTCTTT      300
TAAGACAAAT GGACTTAGCA AACGAGTGTA AATAGGAATG AATGGTTTTC TGGGGTTTAT      360
TTTATTTTAT TTTATTTTAT TTTATTTTAT TTTATTTTAT TTATTGAGAC AGAGTTTCAC      420
TCTGTGTGCC CAGGCTGGGC TCGAG                                         445

```

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GCCTGCCTCC AGGCCTTTGC TCCCACTGTT GNCTCCACTT AGAATAACAT TCCACCCCAT      60
CTCTATAAAT ATCCTACAGA CAAATACTAC CTTCCCCTTA AGGCCAGTTC TAACCCTAAC      120
TGACAACAAA TCATCTCTAC ATGATCTTTT CTTCTGGGA ATGCCTGCAG CACTGTTTAA      180
TCCTGCCCCA CCACCATCCC CTCACCCAGC ACCCTCTCCC AGACCAGACA GGGTGGCTCA      240
TGCTGCAAT CCCAGCACCT TGGGAGGCTG AGGCAGGAGG ATTGCTCGAG                    290

```

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTTGACA TCTTAGAACA TTCTGCAACC TTTTGCCTGG GAAATGGAAA CAGATCTAAT      60
CTTTACCACC CTCATGGCTC AAGGACCTCA TCTGGCAGCC TGGCTCATGT TTTTCAGCCA      120
AGTAGCTTCC AGCTTACAGC AGCCCTCAAA TTTGGACCTG CCACCAGCTC CAGAGCTTGA      180
CTGGATGGAG ACAGGACCAT CTCGTGACATT CATTGGCCAT CAGGATATAC CAGGAGTTGG      240
TAACATCCAC TCAGGTGCCA CACCTCCCTG GATGATCCAA GATGAAGAAT ACATTGCTGG      300
GAACCAAGAA ATAGGACCAT CCTATGAAGA ATTTCTTAAA GAAAAGGAAA AACAGAAGTT      360
GAAAAAATC CCCCCAGACC GAGTTGGGGC CAACTTTGAT CACAGCTCCA AGGACCTCGA      420
G                                         421

```

(2) INFORMATION FOR SEQ ID NO:414:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTCGGCC TTCATGGCCT AAGCCAGTCA ACCAGCAGTA TTAGTGCTGT TTTCAAAGAT	60
TTAAGCTCTA TAAAATTGGG AAATTATCTA AGATCATTTT CCCTAAGCAT TGACACATAG	120
CTTCATCTGA GGTGAGATAT GGCAGCTGTT TGTATCTGCA CTGTGTCTGT CTACAAAAAG	180
TGAAAAATAC AGTGTTTACT TGAAATTTTA ACTTTGTAAC TGCAAGAATT CCAGTTCAGC	240
CGAGCCACTT CGAG	254

(2) INFORMATION FOR SEQ ID NO:415:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GCAAACAGAC AAGGCTTACA GGTTAGTTCA GGATCTGCGC CTTATCAAGC AAATTGTTTT	60
GCCTATCCAA CCTGCGGTGC CAAACCCATA TACTCTCCTA TCCTCAATAC CTCCCTCCAC	120
AACCCCTCCA TAACCCATTA TTCGGTTCTG GATCTCAAAC ATGCTTTCTT TGCTATTCTT	180
TTGCATCCTT CATCCCAGCC TCTCTTTGCT TTCACTTGGG CTGGCCCTGA CCCCCATCAG	240
CCTCAGCAAC TTACCTGGGC TGTACTGCCA CAAGCCTTCA CGGACAGCCC CCATTACTTC	300
AGTAGCCCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:416:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 347 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GCCTGCCCCC ACCTTACAGG TCTGGGATGT ACCTTTCCAT CTGTTGCTGC TTTCTTCTAT	60
GGGCCCCCTGC CCTCACTCTC AAGAACCTCA ACTACTCCGT GCCGGAGGAG CAAGGGGCCG	120
GCACGGTGAT CGGGAACATC GGCAGGGATG CTCGACTGCA GCCTGGGCTT CCGCCTGCAG	180
AGCGCGGCGG CGGAGGGCGC AGCAAGTCGG GTAGCTACCG GGTGCTGGAG AACTCCGCAC	240
CGCACCTGCT GGACGTGGAC GCAGACAGCG GGCTCCTCTA CACCAAGCAG CGCATCGACC	300
GCGAGTCCCT GTGCCGCCAC AATGCCAAGT GCCAGCTGTC CCTCGAG	347

(2) INFORMATION FOR SEQ ID NO:417:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```

GAATTCGGCC TTCATGGCCT AGCAGATGAT TGACATTGCT ATCGATGGTT TCCTTTTGAC      60
TCCAGTGCAG AAGATCTGCA AGTATCCCTT ACAGTTGGCT GAGCTCCTAA AGTATACTGC      120
CCAAGACCAC AGTGACTACA GGTATGTGGC AGCTGCTTTG GCTGTCATGA GAAATGTGAC      180
TCAGCAGATC AACGAACGCA AGCGACGTTT AGAGAATATT GACAAGATTG CTCAGTGGCA      240
GGCTTCTGTC CTAGACTGGG AGGGCGAGGA CATCCTAGAC AGGAGCTCGG AGCTGATCTA      300
CACTGGGGAG ATGGCCTGGA TCTACCAGCC CTACGGCCGC AACCAGCAGC GGGTCTTCTT      360
CCTGTTTGAC CACCAGATGG TCCTCTGCAA GAAGGACCTA ATCCGGAGAG ACATCCTGTA      420
CTACAAAGGC CGCATTGACA TGGATGCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:418:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```

GATAACTTGA GATCAAATCA GTCATATTTG ACTCTTCTCT TTTTCACTCC TTTTATATCT      60
GATCAGTCAG CAGTTTTTTT AAACCCTGTT CGAAGCAGTT CTCAACACTT GTGCACCCAT      120
TCTTTCTCCT ACACCACTCA ATCTAGACCC TCACATGTGG CTGTCTGCTT TTCCTTCTCT      180
CCTACTTCTA AGCTATTCTG TGGAGAGATG TCAAAGTAAT CTTACAAAAA AATCTGATTG      240
CATCACTTCA CATCTCGAG                                                         259

```

(2) INFORMATION FOR SEQ ID NO:419:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

```

GAATTCGGCC AAAGAGGCCT AATTAGAAAT GGCTACTCCC CAGTCAATT TCACTTTTGC      60
AATCTGCATT TTAATGATAA CAGAATTAAT TCTGGCCTCA AAAAGCTACT ATGATATCTT      120
AGGTGTGCCA AAATCGGCAT CAGAGCGCCA AATCAAGAAG GCCTTTCACA AGTTGGCCAT      180
GAAGTACCAC CCTGACAAAA ATAAGAGCCC AGATGCTGAA GCAAAATTCA GAGAGATTGC      240
AGAAGCATAT GAAACACTCT CAGATGCTAA TAGACGAAAA GAGTATGATA CACTTGGACA      300
CAGTGCTTTT ACTAGTGGTA ACGGGCTCGA G                                         331

```

(2) INFORMATION FOR SEQ ID NO:420:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 269 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GAATTCGGCC AAAGAGGCCT AAGAGCATTT ACCTGTCTGA CAATTGTATT TTTAATGATA	60
GTTTGCTTTT ACTTGGTCTT TATATATTCA ATTACAAATT ACTGATATTT TGTTTAAATC	120
TACCACATTT TTCCATTGA CTGTTTATTT TTATGTCCTT TCTTTCTTTT AGATTAAAGTC	180
TTTTTCTTC TCACCCCTC ACCCCTCCCC CCTGGTTATA CATTCTTTTA CTATTCTTTT	240
TGTTATTCCA TAGTTGCAGC AACTCGAG	269

(2) INFORMATION FOR SEQ ID NO:421:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 405 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

GAATTCGGCC AAAGAGGCCT ACATTGAGGT AAGAGATATT TAAAAGGTTT TTAGGTGAAA	60
TTTGAAGCAG GGATGAGATT GGGATTCCAC CTTTGTTCC ATGCATACCT GTTGATAATC	120
AGCTGTTTCT GTATCGACTC CGTGTCAACT CCAGAGCAGG GGGTATCCTC CTGTAGTGCA	180
CCTTCTCTCT TGGCTGGAG GCAGCACTTT CTGTGCCTGG GCAGCAGAAA TGGGAATGT	240
TCTTTGGTCC GTTGAAAAA CGGGCCCAA CATCTAGCCC TGTGCATAA GGCATGGAAT	300
TGCCCAGTTG GGGAGGACCT GTGCTGGAAA GGGATCATCA AACTCCATCT GCCCATCAG	360
ATGCCTGAAC TCTTGATACA ACTCCTGCCA TCCAAGCTAC TCGAG	405

(2) INFORMATION FOR SEQ ID NO:422:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GAATTCGGCC AAAGAGGCCT ACTCGTACTT ATTTATAAAA AAAGTTAACT GTAAAACAGC	60
CTCAGGCAGG TCCTTCAGGA GGTACTCCAG AAGAAAGTAC TGTTATCATA GATGACAACT	120
CCATATGTGT TATTGCACCT GAAGACCTTT CACCTGGACA AGATGCCGAG GTGGAAGACA	180
GTGATACAGA TGATCCTGAG TATCTTAGTT TTTTGTTTT TGTTGAGACG AAATCTCACT	240
CTTGCCCCCA GGCTGGAGTG CAATGGCAGC ACCTCGGCTC ACTGCAACCT CTGCCTCCCG	300
GGTCAAGCG ACTCTCCAAG CCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:423:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC	AAAGAGGCCT	AGAATAATAC	ACTAGTAAAA	AAAAATGTAT	GTCAGGCACT	60
GGGAAGGGCA	GTAGGAATAT	AGAAATGAGA	AGCCGTGGAT	TAGAGACTCA	CAGTCTACTG	120
GGTAAAAGAA	TACGAAAGCC	AATGTATTAT	ACTGTGGTAG	CTGCTTTAGT	AGATGTATGG	180
ATAGAAAAGT	AACAAGAGAA	GAGAATGACT	ATCTCTGCCT	AACAGAAAGA	TATTTTAAAA	240
GAAGGGTTTT	GGGGCTGGAT	TTTGAAGGCT	CAATAGGCTC	CTACCATATA	GAGAACTAGG	300
AAGCGAGTCC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

GAATTCGGCC	AAAGAGGCCT	ACTATCCAGG	TTTACATTTT	AAGGCAGTCG	AGACCTTATT	60
CACGTGGTAT	ATAACAACCC	ACATTTCTCT	TTTATATGGA	ACAACACTTT	TCATTTGCGG	120
CTGGCCTTCT	CACTAGCTTA	TGCTTTTTTT	TTTTAAGACC	TTTCTTAGCA	CTCGCTGAAC	180
TCCTCCCCCT	CACAATCAAT	CTCAGCAACT	CAGCAGAGTC	GCTTCAGTTC	ACAGCTCTTA	240
ATCCTTCACT	CCAGACTAAA	GCTAATCTTA	TGTCCTCAAA	CAGCTACAAC	TCACTGTTAT	300
CACAGTTCCG	ACAGCAGAGA	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

GAATTCGCCA	AAGAGCCTAT	AGAAATAATA	CCACGACCTG	CGCATTCAAA	GCTGTTGTAT	60
CTGGATTGTG	ACTGCGTGGA	AGGTCGAGGC	GGGAAGACAG	GGGCTGTTGC	TTTTCGTTAT	120
AAACTCTGCA	TACTTGATT	TTGCACTAC	GTACATTTAC	TTTGATAACA	CTGGAAGAA	180
TAAATTGGCC	ATGTAGTGTA	GCTTCCAAAA	AAAATATTG	CTTGGGTTTC	AAGGTCAAGG	240
AAATTTTCATT	CTCATCAGTT	TCTTGGGAAA	GAGGAAGTGG	AATGATGTTG	TCAGAAAGTG	300
AAACCATGGG	TCATTTTCAG	AACTACTCAG	AGTAATAAAT	ATTTTTTGTC	AGTTTTGTTC	360
TTACAACTGA	AATGGTCCCC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GAATTCGGCC AAAGAGGCCT AAGAGATTTT TATTATGATT TTGATTTCCT TACTACAACA      60
TTGCATGTGT CTGGAGTATA GCCATTACAC TTTATGAAAA AGGCAAAATG GTCATTGTTGG      120
GTGTTTTAGG AAGTTTGCCA AAAGGCTCCT TTGTCATTAT AATCCTTCCT AAGCTGCCAT      180
CCACGGGTTT AGGTCATGGA TATGAAAAGT GAAAGGGTTT AGAGATGAAG TAGTGTCCCC      240
TGAGTGCTTA CCAACCTGTT AATCTTTTTG AGATGTTAAT TTTTTCATAT AGAGCCCCCT      300
AAAATCTTGA TGGCTCTAGA TCAGTCAAGC CTAAGAGAAG ACGTATTTAT GGAAAAAAC      360
AAAAACAAA AAAACCTTGC TGGATTGCTA GTAATATCTA CTTCTTGAA ATTAATACTT      420
CATATTTTTT AAAAAATTA TTGATGCATT AGGACTCGAG                                460

```

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```

GAATTCGGCC AAAGNGGCCT AGGAAAAACA TGAAATACAT AAATGGATTA ATTTTGCAAA      60
TTAATCTNGC AAATTAATCT ATAGCTCTTA ATGTTTCTTC CAAATTAAAG GAAAAATGGA      120
TAAGGAAGTA CTTTCTTGGC AAACGTGAGA TGAATACTGA ATAAAGTCA TTCTTTCCTA      180
AAGAAGAAAA GTGCATTTTA GTTTTTTTAGA AAAAAATGTAA TTTTAGAAAG TCTCTTCTAT      240
GCAGATTTTA GAAAGTCTTT TCTATTTTGA GAAAGTCTTC TTGTATGCAG ATTTTGTTC      300
ACTTCCCCAT CTGTACTTAC CAAAGGAAAA ATAAACAGTT TATAGAATAT TAATAGAATA      360
ATTATGTGCN ATGTAAAATA TGTTGAATCT CCCTAATTTA TATTTACTAT GTGAATATAA      420
ACTACAGAAT AAAGAAACTG TTCCTCCTTT TATCCATTAT TTTGTTGAAA ACAACTAAAG      480
AAATCTTACA GATTAATGTT CATATTAAAA GGACTCCTCG AG                                522

```

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```

GAATTCGGCC AAAGAGGCCT AGGTAGTTAT CAAGAGATTT TAAAACTTCA ACCCTTTTTC      60
TCTTATAGTT AGTGAAGAGA GTAGAATATC TCCAGTTTTG GCTGACATCT CTACAACTG      120
AACCAATTGGC TTAAACTTCA CTTGGGATTC CCGGTTGCTT GTTTAGCAT GGCNAAATTT      180
GGCGTTCACA GAATCCTTCT TCTGGCTATT TCTCTGACAA AGTGTCTGGA GAGTACAAAA      240
CTGCTGGCAG ACCTTAAAAA ATGTGGTGAC TTGGAATGTG AAGCTTTAAT AAACAGAGTC      300
TCAGCCATGA GAGATTATAG AGGACCTGAC TGCCGATACC TGAACCTCAC TAAGGGAGAA      360
GAGATATCTG TTTATGTTAA ACTTGCAGGA GAAAGGGAAG ATTTGTGGGC AGGAAGTAAA      420
GGAAAGGAGT TTGGATATTT TCCAGAGAT GCAGTCCAGA TTGAAGAGGT GTTCATATCT      480
GAGGAAATTC AGATGTCAAC GAAAGAATCT GACTTCTTT GTCTTCTTGG AGTAAGTTAC      540
ACATTGACA ATGAAGATAG TGAATTAAAC GGTGAACCTG AG                                582

```

(2) INFORMATION FOR SEQ ID NO:429:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

GAATTCGGCC	AAAGAGGCCT	ACTGATCAAG	TGACCCATTA	CTGCGGGAAA	AAACCACACA	60
TACAAAAGCC	TTTGACCCCA	GTAATTTTGT	ATTGGTATAT	TTACCCTGAT	CTTAAACTGC	120
AAGGAATGTC	CGCAATTAGA	GTTTTTCTTT	GTTTTCTAAG	TCTGAACTT	GATAATCCAT	180
TTCTGCCTTC	CCATGACGAG	TGGACATTCC	TCCAGCCAGT	GGTGAGTTCC	TCTTTCCTTC	240
GCTCTCAGCA	AGAGCATGGG	TTGCCCTCCC	ATCTCGTAAG	CAGAGCCTAC	CACAAACGCA	300
GCTCAAATCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:430:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 556 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC	AAAGAGGCCT	ATTGGGTCCT	ATTTACAAC	TTAAGAATGG	AGGCATACTT	60
CAGGAAAGAA	AGCACCAGTG	CAGTTCCAAT	TTATTATTGT	ATCTGCTGTC	TTGAGAGTAC	120
AGGGTGTATG	AGAGTGACAC	GTGGTTTAGA	ATCACTATGG	AATTTAAAAA	GACCCAGAGA	180
CATTAACAAG	AATCCACATT	CTAAGTCGTC	AGAATCCACA	TTTCTGACCT	TGTCTGCTGG	240
GGCCTGCTCT	GTTTTTGATG	GCTCAAAATA	TAATTCTTTT	ATTGAAATAC	ATGTTCTCTCA	300
TCCTGTTTCA	GGGCTTCTGC	CTGGAATGTT	CCTCCCCCTA	GCATTTGTAG	GGCTGGCTCC	360
TTCTGTGCAT	GCAGGTCTCA	GCTCAGATGA	CCCCATCTCA	GAGAGGGCTT	CCCTGACCAA	420
CCAATCTACA	GCCCTTCCTA	GTCACTTTTT	TCCACATCAC	CCTCTTTATG	CATGGAGGCA	480
GATAGGTGTT	TTACCCTGTT	TATTTATTAT	TATTATTTTT	TTGAGACAAA	GTCTTGCTCT	540
GGCACCCAGG	CTCGAG					556

(2) INFORMATION FOR SEQ ID NO:431:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 424 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GAATTCGGCC	AAAGAGGCCT	AGAAGTAACG	GAAGCTACCT	TGTATAAAGA	CCTCAACACT	60
GCTGACCATG	ATCAGCGCAG	CCTGGAGCAT	CTTCCTCATC	GGGACTAAAA	TTGGGCTGTT	120
CCTTCAAGTA	GCACCTCTAT	CAGTTATGGC	TAAATCCTGT	CCATCTGTGT	GTCGCTGCGA	180
TGCGGGTTTC	ATTTACTGTA	ATGATCGCTT	TCTGACATCC	ATTCCAACAG	GAATACCAGA	240
GGATGCTACA	ACTCTCTACC	TTCAGAACAA	CCAAATAAAT	AATGCTGGGA	TTCTTTCAGA	300
TTTGA AAAAC	TTGCTGAAAG	TAGAAAGAAT	ATACCTATAC	CACAACAGTT	TAGATGAATT	360
TCCTACCAAC	CTCCCAAAGT	ATGTAAAAGA	GTTACATTTG	CAAGAAAATA	ACATAAGGCT	420

CGAG

424

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```

GAATTCGGCC TAAGNGGCCT ACATAAAAGT AAGAAAATAT CTTACTAAAA TCTCTTTTCT      60
TATAACATTT AGNTTACGTA TATATTTTAT CTCCTTTTTT TTGNAATATA TATAAATCAA      120
ATAACAGCTG AATAAACCTT TGGTCTTTTT TTTTTTTTTT TGTCTCAGGA TTGTCTTTAT      180
CTGGGACCCG AGATTAATTG CTCGTTTTTT GCTTTGGCAA AAGATTGTTC TTACAATTTT      240
TAGTCTTTTA AAGTTGACAC AGATTTGTTC AGTCTTGCTC ATTCTAAAAG CACACAAAAG      300
TTGAGCATAA AAATAGGATT AAATTTAGCA ATAAAGAATT ATAAAGACTA AAAGATACTG      360
AGTAAGTTGT TTGACAGAAA CCTGATTATC CATGATGATT ATTGTCAGGC TTCTCGAG      418

```

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

```

GAATTCGGCC AAAGAGGCCT AGAACTCCAG AGGCAAGTGT TATATGAATT ATGCATTTGA      60
TTCTACATGT TTATTAGACA TGTATGGCAG ATACATTTAT ATTTTACTAA TGGTTATGAT      120
GACTTTAATA ACTTCAAAG GATTATGGGG ACTCGAG      157

```

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

```

GAATTCGGCC AAAGAGGCCT ATGTTTTTAC TACTATTATT TTTTTTTACC CAAGGGAGAA      60
AGACAAAAAA ACGGTGGGAT TTATTTAACA TGATCTTGGC AAACGTCTTC TGCCCTTTCT      120
TCTTTCTAGA CGAGACCCTC CGCTCTTTGG CCAGCCCTTC CTCCTGCAG GGCCCCGAGC      180
TCCACGGCTG GCGCCCCCCA GTGGACTGTG TCCGGGCCAA TGAGCTGTGT GCCGCCGAAT      240
CCAACTGCAG CTCTCGCTAC CGCACTCTGC GGCAGTGCCT GGCAGGCCGC GACCGCAACA      300
CCATGCTGGC CAACAAGGAG TGCCAGGCGG CTTGGAGGT CTTGCAGGAG AGCCCGCTGT      360
ACGACTGCCG CTGCAAGCGG GGCATGAAGA AGGAGCTGCA GTGTCTGCAG ATCTACTGGA      420
GCATCCACCT GGTCTCGAG      440

```

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

```

GAATTCGGCC AAAGAGGCAT AACATAGAG AAATTGGTGA TGTAAACCT TCTGAATTTT    60
GTTTTAAGTG CACTGGGAAG TGATGGAAGG GTTGTAGCA TAGCAGTAAT CTGATCTGAT    120
CTGATCCGGT GTGAATGTCT TTTTAGCAGA TGATTTTATT TTACCAGCTC TCTNGAAAGT    180
TTAATCAATG TGATAGCCAT GACAGTTTAT TAACTACTT ATTTGAGAAA GTAAGTGCCT    240
GTGGGAATCC AGATTATTTG TTTACTTCAT TTTAGATGTT AGTGCTAGCA CCCTTGTTTA    300
ATATTTGTTT TAACACTTAT ATACTTAAAA GCAGGAAATC TCGAG                    345

```

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

```

GAATTCGGCC AAAGAGGCCT AAGAACTCAC AATAAAGTAT CATATTCCTC TCTTTTGACC    60
TAGAATTCAT AGCCCTAGTA ATCTCGTTTT GATTAGATGC TTTGATTGGC AGTTATACAT    120
CTTTGATAAC ATTTTCAATG TGAAATGAAT TATTCTTTTCG TTAAAGCCAT TTTAAGCAGA    180
ATGTCTATAA ATGAGGGCCC ACGAGAAGGA ATAACAAAGC AGGGGTGTTG GGGATGGTGG    240
CTGGGGAGCT TTGGTGTATT TATTAACCTG TGGTTGAGTT TTGCGATGTG TGCAAGTACA    300
CACAGCCCCG AACAACTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

```

GAATTCGGCC AAAGAGGCCT AGTTTTAAAA CGTATTGTTT AATTTTCNAA CATTTAGGGA    60
TTTCCAGAT ATCTNGTTG TNGGTTTCTA ATTTGATTCC ATTATGGTTA GAGACCATAC    120
TTGGTATGAT GAATTAAAAA AAAAAATNTA GAGGTTTGTA TATGGCCTGA AACATTTTTT    180
AGGTGAGTGT TCAGTTTGTA ATAGGAAAGA TGTGTCCTGC TGCCGTTAGG TAAAGTGTTT    240
CATAAGTAAT AATTAGGTCA AGTTGGTTGA TCGTGNTAAG GTCTGCTCTA TCCTTGCTGA    300
TTTCTGTCT GCTTGTTCTA GTGATTACTG AGAAAGGAGT GTTGAAGTCN ACAACGATTG    360
TTATGGGTTT GTTCTCTTTC TCCNTGAAAT TCTGTCTGNN TATGCGTCCT GTATTTTGAG    420
GACCCCTCGA G                                     431

```

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

```

GAATTCGGGC TTCATGGCAT ANGCAGAGGT TCCGGGNCCA GNNCANGCNC GGGACAAGNT      60
CAGAGATGAN GTTGCCCANAG GTNATGNNGA ACTCCAGTNC CCGNTGTCCC CGGNTTTTCT      120
CTCTTGTTGGN ACATGGGGAN NTNTGGANTC CAGCTCCCAG NACTGGAGTG CTATTC AANT      180
GATCNAGGAN GGAAGTGACA NAAATGTTTT TTTTTTTNTT TTTTAAAAA GNAGNNNCNN      240
GGGGATCNGA AGNAGATGAA TGCCCTCAAA GGCCATGNAT GTACTTCAAA NGAAGTGGNT      300
NNTGAAAACA GNTNNAANAA TGTAANCGA NAGTNAAAAT NNATGTTGNG GANGAAGGAA      360
NTTGGTGGNN AGTNAAAAA GAAGTAANCC GA                                     392

```

(2) INFORMATION FOR SEQ ID NO:439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT AGGTGTGCTT CCCTTTCCCC ATTTCCCATTT ATTCCAGCT      60
GTATAGTAGT GTAGTGAAAA TCACTTGAGA TGTGGAAGAG TAGTCTGGTC TAGGAAGAGA      120
GAGGGAAAAG TAAGTTTCCC AGGATAAGAG GGGGAAAAAA GGCCCCAAAG CCTTCTCAAT      180
GAGGAATGGG GAAGGAGGTT TTGCTGCCAG GTTTTACTAA GTGCATTTGA ATGAACCCTG      240
CTATTGTAGT CCTCTTTTAT TAATGCTTTC CTGACATTTA CCCTGTTAGT TGAGGCTACT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT AATCACNGNA GTGACTGACA TTATATATTA NGGATCAAAT      60
TATGTCCACA AGCAATATTA TATAATCTAC GTAGAAGTGT AATAACAAAC AAGAGTACAC      120
TTAAAATTAC TTAAAAGAT GTCTTTAGTT CATTCCAATA TAATTCTTGA TTAAAATTAG      180
GATTATTTCT ACATTTTAGG ANNTACAAAG GATCACGGGT AACATGGATT GGGNCCANAT      240
ATTTTTTTTAA AGTTTCGAAT TGGTATCTGT AGTAGTGGAA TGTTATAGAT TTGAAGTAAC      300
TCTCCACGGA CAGTGCTGCT TTCGTGTAGA GCAATTTAAT TGGAGAAGTG GCCATTCTTA      360
CTTCAGGGAT GCAAAGATGG TCTCATACCA TTTGGATAAA TGTCGTGGTA TCCATGCTTT      420
TTTTCAACTA ATAACATCAT CTCTCTTCAT GACCAGTTAA TTGGGCTATT TGGCAGCCCA      480

```

STGAACCTAT GTACTAATGG CAAGTTAGGG GCAAATGGAA ATGGACACAT CCGATAAAGT 540
 TGAAATGTAT GTTTAATCT TTCACAGAAG TCCCTCGAG 579

(2) INFORMATION FOR SEQ ID NO:441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCGGCC TTTATGGCCT ACCTACGGTA CCTGAAAACA ACGATGGCAT GGAAAACACC 60
 TCCCATTAC CTGTTGTTGC TGCTGTCTGT TTTCGTGATT CACCAAGTTT CNTCTCAAGA 120
 TTTATCNCC TGTGCAGGGA GATGTGGGGA AGGGTATTCT ANAGATGCCA CCTGCAACTG 180
 TGATTATAAC TGCAACACT ACATGGAGTG CTGCCCTGAT TTCAAGAGAG TCTGCACTGC 240
 GGAGCTTTCC TGTAAGGCC GCTGCTTTGA GTCCTTCGAG AGAGGGAGGG AGTGTGACTG 300
 CGACGCCCAA TGTAAGAAGT ATGACAAGTG CTGTCCCGAT TATGAGAGTT TCTGTGCAGA 360
 AGTAAAAGAT AACAAGAAGA ACAGAACTAA AAAGATACCT ACCCCCAAAC CACCAGTTGT 420
 AGATGAAGCT GGAAGTGGAT TGGACAATGG TGACTTCAAG GTCACAATC CTGACACGTC 480
 TACCACCCAA CACAATAAAG TCAGCACATC TCCCAAGATC ACNACAGCAA AACCAATAAA 540
 TCCAGGACC CTCGAG 556

(2) INFORMATION FOR SEQ ID NO:442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

GAATTCGGCC TTCATGGCCT ATTATTTTGG CACCAGCGTC AAGACAAATA ATATCCTCTC 60
 CCATTATTTT CATAAGTAAC ACAGATTCCC TGATTTTTTAA AACTAAAAA TACAGCTAAA 120
 CCTTTCTTAT GTATAAAGTA TGCCTATCAT ATACAGGGAG AGGTGGGTAA TAAACTTCCT 180
 GTAATGACAG TGTTTGGCAT TTCTTTATGG ATGGAATTGG AACATGAACA AGACCATGTC 240
 CAGCGTTTTT ACTGTGAATG TAAATGGAAC AGCAGCCCAA AGCTGTTGTC TGTGCCCCAG 300
 AGGTGCTACC TGTAGACAGG GACCAACTCC ATGTGTGTGT GTTAAGTGTT TGACTCCAAT 360
 TAAGACTCCC AAGCAAATCC TGCATATTCC AAATGTAAAG AGTACTCAGT GGGAAAAAGG 420
 TTGTTACCTC AAAGTCATTG CTTCTTTCCT GGCTGGGTCA CAGGGTGAAG AGATGAAGGT 480
 GTCTGATGTA TATAGACAAT TAGGGAAAAA TGAGCGGCTT TCCTCGAG 528

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

GAATTCGGCC	TTCATGGCCT	ACTGGAATCT	GCAGCCCCCA	CATGCATCTG	TCTAACGCAT	60
GCCTCGTGTT	CGTTTTGCAA	ACATGCCTGT	GGTGGAGGGT	GGTCAGTTGT	AGCCCTGTGC	120
GTCTCAAGGC	TGCCTTGTGA	GGCCATTCCC	AGTGCGTGCC	CTTGAGCTCC	TTACCACCCC	180
TTTTCTGCT	CGGCCCTTTA	ATCCCTGACA	GACCTGGACT	GTGTGGCTGA	AGGGGGACCT	240
GCAGACTGC	AGAAATGCCT	CTGCGTGGTG	CCATGAAGGA	AAGAAACCTT	GGCCTGGTCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

GAATTCGGCC	TTCATGGCCT	AGGGCAGGGG	GAGGGGTGCA	NAGTGGGACC	CTCACCACAG	60
GGTACTGAGA	CAGGTCATTG	TAGGTCCGCC	CCGCAATGGT	GTGAGTTGC	ATCAAGTACT	120
CGAAGTTGGA	TATCTCAGC	TGTACCCATT	TCTGGGTAAG	GCCTGAGGCA	CGCACCATCT	180
CCTGGGGGGA	GCGGCTGCTT	AGGTAGCCAA	GAGAGGGGGG	CCGTAGGCGC	AGGANCCACG	240
AGTACACCTG	GCCCCATCCC	ACCCCATCCC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 418 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

GAATTCGGCC	TTCATGGCCT	AACCAGCTTT	AATTTCAATT	GAGGAATAAT	AACAACCCTA	60
GAGATTCATA	GGAAAGAGCA	TTGAAATACA	TTTTTTGCAT	AAAGATACCT	AAAACCATCT	120
ACCCAGCTTA	GGGTTGAACT	GAATTTCTGT	GAAATAAATT	TGTTTTAAAT	ACTAATTATT	180
TTAAAACTAC	TTAATTTCTTA	AAAACAATGT	CATCAGTTTC	AAAAGTTTCA	CTTTGGGAGG	240
ATATTCCTTA	AAAGGCATAC	ATAGATGGTA	AAGTATAAAA	TATTTCTGAC	AGAATTATTC	300
AGTATTATTC	AACATTTACT	TTCATGTTTG	TTATTGTACC	ACAAAGATAG	TGTCATTGTT	360
GGGTTAAAT	GTTGGCTGTT	TTGTTAATA	TACTTAAAC	TGTAACCACT	GGCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

GAATTCGGCC	TTCATGGCCT	ACTACATCAA	GCACCAGAAC	CGCCAGCTGC	GCGCCCTGTT	60
GCTCAGCCAC	CAGTTCAAGC	GCCGGGAGGC	CGACCAGACC	CACGCACAGA	ACTTCTCCTC	120

CGCCGTGAAG	TCCCCGGTCC	AGGTCATCCT	GCTCCGTGCC	CTCGCCTTCC	TGGCNTGCGC	180
CTTCCTACTG	ACCACCGCGC	TGTATGGGGC	CAGCGGACAC	TTCGCCCCAG	GCACCACTGT	240
GCCCCTGGCC	CTGCCACCTG	GTGGCAATGG	CTCAGCCACA	CCTGACAATG	GCACCAGGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:447:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

GAATTCGGCC	TTCATGGCCT	ACAGAGATGG	ATTATCCTAC	TTTACTTTTG	GCTCTTCTTC	60
ATGTATACAG	AGCTCTATGT	GAAGAGGTGC	TTTGGCATAAC	ATCAGTTCCC	TTTGCCGAGA	120
ACATGTCTCT	AGAATGTGTG	TATCCATCAA	TGGGCATCTT	AACACAGGTG	GAGTGGTTCA	180
AGATCGGGAC	CCAGCAGGAT	TCCATAGCCA	TTTTCAGCCC	TACTCATGGC	ATGGTCATAA	240
GGAAGCCCTA	TGCTGAGAGG	GTTTACTTTT	TGAATTCAAC	GATGGCTTCC	AATAACATGA	300
CTCTTTTCTT	TCGGAATGCC	TCTGAAGATG	ATGTTGGCTA	CTATTCCTGC	TCTCTTTACA	360
CTTACCCATG	GGAACCTCGAG					380

(2) INFORMATION FOR SEQ ID NO:448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 144 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

GAATTCGGCC	AAAGAGGCCT	AAACAAATGA	GGGTAGTAAT	TTTTTATCTG	CTAAAACTTA	60
TATTTATATC	ACATACTTGT	TGCAATGATT	TCAGTGTCTA	CATAAATGGT	GGCTTAGCTG	120
AGGCAGGTCT	AGAATTCAAT	CGAG				144

(2) INFORMATION FOR SEQ ID NO:449:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTCGGCC	AAAGAGGCCT	ACTAGACGTT	TGTACAAACT	ATTCCCTTGA	GTTATTTTCT	60
CTGGCTCTTC	AGCTCCTTCC	TCCCACCCCC	TCCCCTGCAC	CACCAATCCA	TTCTTTTGCT	120
TAATTTCTCT	CCATCCTTCA	GGTTTCAGCT	TTAAGAGGTC	ACTTCTTTTA	GGAGACATTC	180
CCTGAATCCT	CTCACCTCCA	CCCACAAAAA	AGGCCTCTCC	AGATGCCCTT	CTTTTCTGCT	240
CAACCTCAT	CTGCTTCCTT	TATCATATGC	TTATCGTTTT	GGATTGTAAT	TATTTATTTA	300
ATTGCATGTC	TTTCTGCTAG	TTTTTGTGTT	AGCAACAACA	AGGATCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:450:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 505 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

```

GAATTCGGCC AAAGAGGCCT AGATGATGGC AGGAATGAAA ATCCAGCTTG TATGCATGCT      60
ACTCCTGGCT TTCAGCTCCT GGAGTCTGTG CTCAGATTCA GAAGAGGAAA TGAAAGCATT      120
AGAAGCAGAT TTCTTGACCA ATATGCATAC ATCAAAGATT AGTAAAGCAC ATGTTCCCTC      180
TTGGAAGATG ACTCTGCTAA ATGTTTGACG TCTTGTAAT AATTTGAACA GCCCAGCTGA      240
GGAAACAGGA GAAGTTCATG AAGAGGAGCT TGTGCAAGA AGGAAACTTC CTACTGCTTT      300
AGATGGCTTT AGCTTGGAAG CAATGTTGAC AATATACCAG CTCCACAAA TCTGTCACAG      360
CAGGGCTTTT CAACACTGGG AGTTAATCCA GGAAGATATT CTTGATACTG GAAATGACAA      420
AAATGGAAAG GAAGAAGTCA TAAAGAGAAA AATTCCTTAT ATTCTGAAAC GGCAGCTGTA      480
TGAGAATAAA CCCAGAAGTC TCGAG                                           505

```

(2) INFORMATION FOR SEQ ID NO:451:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 347 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

```

GAATTCGGCC AAAGAGGCCT AGTCGTAAGT TACCATAATA GGTGCTTGCA GTCATTGATA      60
TAATCCAGAA AGCTAACGAA ATGCAAATGA TCAGGCTCAG TATAACTATA TTAGTTATCA      120
TCTTTATATA TCTTTTGCAT ATATTGTCGT TAAGATCTGT CATGGAAAAT AAGGATATGA      180
GCTCCTGCGG GAAAGAATAT TTAGCGTTTC GGAGAGAAAG TCATTTACGA TGTGAGCAAG      240
ACACTTGTTT AGAGGCAAAC ATAAATCCCA ACATATTCCA CCGACCAAAC AAGCATAAAA      300
ATCACAAAAA TTCAAATCC TTCCGGAAAC TCCTACTGGC CCTCGAG                                           347

```

(2) INFORMATION FOR SEQ ID NO:452:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 394 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

```

GAATTCGGCC AAAGAGGCCT ATCTTACTAT TTTTATGTCA TTGGTTTTTT CTCTTTCTT      60
TCTTTCTTTT TTTTTTTTTT TTTTGGAGGC AGAGTCTCGC TCTGTGGGGA CACTGTTCCG      120
TTCAGAGGCC CCTCCAGGCC ATGGGGTGGG GGACAGTGGT GGGCGTGGGA ATCCAGCGA      180
GCATCCTGGA GGGTGCGTCG TCTCCATGTA TTTTGCTCTT CCCCATCTTT TCCATGGGGT      240
CCCCTGCCAG GGTCAAGCAC TAATATGTGG TGAAGGCAGC AACACGCGTC GGCCTCCCTT      300
TAGGGGTGGG GAGAGGGCTG TAGCACCAAG AACCCCTCC CCCGCCACG ACATCCCTGA      360

```

AAAGGAGACT AAAATAAAGC CCCGGCGCCT CGAG

394

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

```

GAATTCGGCC AAAGAGGCCT AGGAAAAACA GAGTAAAAAA TTGGAAAAGA AGAAGGAAAC      60
AATAACAGAG TCAGCTGGTC GACAACAGAA AAAGAAAATA GAGAGACAAG AAGAGAAACT      120
GAAGAATAAC AACAGAGAT : TATCAATGGT TCGAATGAAA TCCATGTTTG CTATTGGCTT      180
TTGTTTTACT GCCCTAATGG GAATGTTCAA TTCCATATTT GATGGTAGAG TGGTGGCAAA      240
GCTTCCTTTT ACCCCTCTTT CTTACATCCA AGGACTGTCT CATCGAAATC TGCTGGGAGA      300
TGACACCACA GACTGTTCCC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

```

GAATTCGGCC AAAGAGGCCN AGGGTCACAG GGTGGTTATC TCACTTCGCA GCTTTTCCTT      60
TCTGAGGCCA GAAAAGGAAG GGGTTTGCTT TCCTCTAGTA TTTATTCTTC TGGACTACAT      120
CAAGTACTCT AAGCCTGATG TTAGGCAATA ACTGCCCAT T AGCCATTGGC TACATTTGCC      180
TCTTTCTTGT TCCAACAATA TTAGTGATCT GTGGNACAGG ACACACTCTT TGTTTGCTAG      240
CTACAAATTC TAACAAAGCT AAGTTTTATT CATGTAGNTA TTCACAAATT AANACAACAC      300
ACACACCACA CACACACACA CACACACACA CACACACACA CACACACATA CCACAAAACC      360
CAGAGATCAC CAAATACTAT ATAAATAAAC AAGCCCCAAG TCACAGATCA GGGACACTCG      420
AG                                     422

```

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

GAATTCGGCC AAAGAGGCCT AGACGTCCAA GAAAAACAT TTGGTGAAAG TCAGGATTTA      60
CCTTTGAAAT CCGACTTGGG CACCAGGGAA GATAGTAGTG TTGCATCTAG TGATAGGAGT      120
AGTGTGGAGC GAGAAGTGCG AGAACACCTA GCAAAAGGCT TCTGGAGTGA CATTGGCAGC      180
ACGGACACTC CTTGCCAAT GCAGTTATCA CCTGCTGTGG CCAAAGATGG CTCAGAACAG      240
ATCTCACAGA AACGGTCTGA GTGTCCGTGG TTAGGTNTCA GGATTAGTGA GAGCCAGAA      300

```

CCAGGTCTCA CTCGAG

316

(2) INFORMATION FOR SEQ ID NO:456:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 458 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

GAATTCGGCC AAAGAGGCCT AGTCAGTCTG AGTTAGAAAA TCGACTCCAT CATCTAACAG	60
AGACTCTCAT CCAGAAACAG ACCATGCTGG AGAGTCTCAG CACAGAAAAG AACTCCCTGG	120
TCTTTCAACT GGAGCGCCTC GAACAGCAGA TGAATCCGC CTCTGGAAGT AGTAGTAATG	180
GGTCTTCGAT TAATATGTCT GGAATTGACA ATGGTGAAGG CACTCGTCTG CGAAATGTTT	240
CTGTTCTTTT TAATGACACA GAAACTAATC TGGCAGGAAT GTACGGAAAA GTTCGCAAAG	300
CTGCTAGTTC AATTGATCAG TTTAGTATTC GCCTGGGAAT TTTTCTCCGA AGATACCCCA	360
TAGCGCGAGT TTTTGTAATT ATATATATGG CTTTGCTTCA CCTCTGGGTC ATGATTGTTT	420
TGTTGACTTA CACACCAGAA ATGCACCACG GCCTCGAG	458

(2) INFORMATION FOR SEQ ID NO:457:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 186 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

GAATTCGGCC AAAGAGGCCT ATCGAGGTTT GGTGACTGA TGAAGCTTT TATTTCTTTA	60
ACCATTTATG CATTTTCTCA ATTTGCTACA ATAAACATAG ATTGCACAGG GGTGAATACT	120
AAGGAACTCG GAGGGTTAGG GTTAATTCT GTGAAAGACC AAATATGTTT CTCTGGTTCT	180
CTCGAG	186

(2) INFORMATION FOR SEQ ID NO:458:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCGGCC AAAGAGGCCT AGCATTATGG TATATTTTAA ATTCATCAAG CTCATCTGTA	60
TGTGTCTTTT TGTCCTTTTA CTACTGAGAG GATTGGGGCT GGGATCATGG CAGCCTGCTC	120
TGATGTATTT CTCTCCACTC TATTTTATTA TTTTTTTAAA GAGTTCTAAC TTAAATACGT	180
GGACCAGCTA TTGGATAACT TTAATTCATA TATTTATCAT TCTTTCTATT CACTTTGCCA	240
CATACACACC ATGTGATGAT TTAAACCCG ATTTCTGTAT AGAGAATGTT AAAAGGATAG	300
CACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

```

GACATGCTGT GGTTCACCG CGCACTCACC CTGCTCATCA TCCTCCGCCA CCTCACCAGG      60
AAGGACCCAC AGGGGCTGGG CGTGACGAGT GACGCCATCG CCGATGCCTG CCAGGCCCTG      120
GTGGGCCCCA CCGCCACAG CCGTTGCTGG TGATCTCCGG GATCCCCACC CACCTGGACG      180
AGGGCGTAGT CAGAGGCGCC ATCCGCAAGG CCTGCAACGC CCACGGCGGG GTCTTCAAAG      240
ACGAGATCTA CATCCCCTG CAGGAAGAAG ACACCAAGAA GCCAAAAGAC AAGGCCGAGG      300
GCG                                     303

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(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

```

GAATTCGGCC TTCATGGCCT AACTTTAAT TGCTGTTATC ATGGGCCTAA TTACAGTCAC      60
TGCAGTGGCC ACCACTGCCG GAATGGCATT ACACCAGTCC ATCAAGCGG CTCATTTGT      120
TAATGGTTGG CAAGCCAATT CCATCCAAT GTGGAATTCT CAACAAGGCA TCGATCGAAA      180
ATTGGCAAAT CAAATTAGTG ATTTAAGACA GTCTGTTATT TGGCTTGGAG ATCAGGTAGT      240
GAGTCTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

```

GGTGACGCCT GCTTCACATC TCTAATGAAC ACCCTCATGA CGTCGCTACC AGCACTAGTG      60
CAGCAACAGG GAAGGCTGCT TCTGGCTGCT AATGTGGCCA CCCTGGGGCT CCTCATGGCC      120
CGGCTCCTTA GCACCTCTCC AGCTCTTCAG GGAACACCAG CATCCCGAGG GTTCTTCGCA      180
GCTGCCATCC TCTTCCTATC ACAGTCCAC GTGGCGCGGG CCACCCCGGG CTCAGACCAG      240
GCAGTGCTAG CCCTGTCCCC TGAGTATGAG GGCATCTGGG CCGACCTGCA GGAGCTCTGG      300
TTCCTCGAG                                     309

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(2) INFORMATION FOR SEQ ID NO:462:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GAATTCGGCC TTCATGGCCT AATGAAGAAA AGCAGAATTC CAAATTCAAA CTGTTGGAGT	60
GAGCCAAGTG GACAGACCCCT CCATGAGTGC ACTTTCTTCC AAGAAATCCC CAGATTACC	120
CCATAGAGGT CTGGGATTAC CTGGAATATA ATATGAAAAA CATTTTTTAG GCTGGGTGTG	180
GGGCTCACAC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CGGGCGGATC ACCTGAGGT	240
GGGAGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:463:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 225 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GAATTCGGAA CAATGGGGGT TTCAAACAT AAAAGTGAAA GTCCTTGTA ATCTCCTTAT	60
CCAAATGAGA AAGACAAGGA AAAAAATAAG TCAAAATCTT CAGGCAAAGA AAAAGGCAGT	120
GATTCATTTA AATCTGAGAA GATGGATAAA ATCTCTCCG GTGGCAAAA GGAGTCCAG	180
CATGATAAAG AAAAGATAGA AAAGAAAGAG AAACGGGACC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 527 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

CTCGAGGCGT GTGGGATCAT GAGGCAAAGA AAGTCCAACG AGGGAGAGAG GAGAGTGAGG	60
GATGAGAGGG GACACTTGCT CCATCCTAGT CCCCACGCGG CCCAGCTGGC TTCCTTTTCC	120
AGAATATCTC CTTGCTATAA CCTGGCAGCA GGGGAGCCAA GGTCTTCTC CATCCTTACA	180
GGCACTGAAC CAGGATGTAG GCGCACACTG CTGTGTTCTC TCTGGCCCAT CCTCTCTAAT	240
TGTCTTTCCC TTCCCAGGTC ACAGGATGCT TATTCTCATC TCCAGGCCTT TGCACGGGCC	300
GGGCCTGCTG CCAATCCCCG CACTCTCCCC TTCTTAGGGC CAGGCTAACT CTTCCCCATC	360
CCCGGGGCTC AAGCGTTCAG GTCTCTTCCA AAAGCAGTCT TGGTGGTCCC TGCCACGCGT	420
TACCCTCCTC TCAAGTCACC CGGGAGGTGG AGGTGTCTGT AAGCCAAGAT CGCAGTGAGC	480
TGAGATTGCA CCATTGCACT CCAGCCTAGG CCATGAAGGC CGAATTC	527

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

GCACTCATAA	AAATCTTACT	CAGAAATCTT	CAGAGGTTTG	CTAAGGATAC	AATTTGATTC	60
TTACACATTT	AATGCTCACC	AGCTGCTTAG	GCCCACACCA	TTTATCCACC	CTGATTTGCT	120
ACTGCTCTTT	GAAATACAAC	CAGTGTTTCA	GCCAGACTGT	TTTCCTGCTT	CTGCTCCCCT	180
TCTCCTCCTC	CCAGCACATC	TGTGAATTCT	TTGACTGGTT	TACCACTCCC	AAACTCCTCC	240
CCAGCAATGC	AGATCTTCTA	CACCCTTTAG	GATCTAAGCT	AAGTCTGCTT	CCCAGATATC	300
CTCCCGAACA	GCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 348 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

GGTCATTCTT	TCCATCGCTG	CGGACACGGG	AGTCAGAAGT	GAAACAGTCC	TGTCCTCGTG	60
GGGCTTACGT	TCCAGGCGCA	AGAGCCACAG	GATGTCGAAT	TGGGAACCG	CCTCGGATGT	120
CACATAAGCG	CCCAGGGAGG	ACAGGGCAGG	ACAGGGCCTC	CCTGGGGAGG	TGACTTGAGT	180
CAAGACTCAA	AAGAGGGAAG	CGAGGGAACA	AGCCATGCGA	GGAACAAACG	AAGGAACATT	240
CCAGAAAGAT	TTACATCCC	AAGCCTAAGG	TCCAGGGGCA	GCAGGCATTG	AGGCGGATGT	300
GGCTGGAGTG	GAGAGAAAGA	GGAATTAAAA	GGATGGCATG	AGCTCGAG		348

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 293 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

GAATTCGGCC	TTCATGGCCT	ACGAGGAAAG	ATCTAATTAT	CATGGACCTG	CGACAGTTTC	60
TTATGTGCCT	GTCCCTGTGC	ACAGCCTTTG	CCTTGAGCAA	ACCCACAGAA	AAGAAGGACC	120
GTGTACATCA	TGAGCCTCAG	CTCAGTGACA	AGGTTACAA	TGATGCTCAG	AGTTTTGATT	180
ATGACCATGA	TGCCTTCTTG	GGTGCTGAAG	AAGCAAAGAC	CTTTGATCAG	CTGACACCAG	240
AAGAGAGCAA	GGAAAGGCTT	GGAAAGATTG	TAAGTAAAT	AGGCTGGCTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

GAATTCGGCC	TTCATGGCCT	AATAAATTGC	CAGCATANTA	AAAAACTGCC	TTACTCTCAA	60
TTGCTACACC	TTTTACACAG	CAAAAGGTTT	TATTCTCTCC	TAAATTAATT	TTATCCCGTT	120
TTTTTTTACC	ACCTAACTTT	TGCCTTTTAT	TCAGAACTAA	TGTATTTTTT	TCTTATTGTC	180
GTTTTTTTTT	TCAAAATTCC	CTCCTCGGTG	GAAAGTAAAG	GAGTAGGAAC	ATACTATTAT	240
TCAACCAACA	TGCAGCAACC	CTTACGTACG	GTCTCTGAG			279

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

GAATTCGGCC	TTCATGGCCT	AAGTTTTGAA	AAAAAAAATC	TTTAAGTGGA	TTGTGAGTAG	60
ATTTTTTTAA	GGAGCATTTT	TATAATATTT	TTCCTGAATC	CTTGCAATAT	TGACAGTGTC	120
TTTCTATTGT	GTTTATGTGT	GGCAGCAATT	TACTTTATAT	CAAAGTTTTT	TGTTTTTGTG	180
TTTGTTTTGT	GAGACACAGT	CTCACCTTAT	CACCCAGGCT	GGAGTGCACT	GGCACTATCT	240
CGGCTTACTG	CAGCCTTGAC	CTCCAGACT	CAAGTGATCC	TCCCACCTGC	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

GAATTCGGCC	TNCATGGCCT	ATGTTTTTTA	TATATGGATT	TATTTTTGCT	TTTTTAGGCT	60
GATTCAGTGT	GAAAATGAGG	TAGGGAAATT	GTTGTTTATC	ACAGAAATCC	CAGAATTAAT	120
ACTGGAAGAC	CCCAAGTGAAG	CCAAAGAGAA	CCTCATTCTG	CAAGAAACAT	CTGTGATAGA	180
GTCGCTGGCT	GCAGATGGGA	GCCCAGGGCT	AAAATCAGTG	CTATCTACAA	GCCGAAATTT	240
AAGCAACAAC	TGTGACACAG	GAGAGAAGCC	AGTGGTTACC	TTCAAAGAAA	ACATTAAGAC	300
ACGAGAAGTG	AACAGAGACC	AAGGAAGAAG	TTTTCTCCC	AAAGAGGTGA	GAAGGGACTA	360
TAGCAAAGGA	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

GAATTCGGCC	TTCATGGCCT	ACAAGATTGG	CAAGATGCTT	ATTTTGGTG	CCATATTTGG	60
CTGCCTTGAC	CCAGTGGCAA	CACTAGCTGC	AGTTATGACA	GAGAAGTCTC	CTTTTACCAC	120
ACCAATTGGT	CGAAAAGATG	AAGCAGATCT	TGCAAAATCA	GCTTTGGCCA	TGGCGGATTC	180
AGACCACCTG	ACGATCTACA	ATGCATATCT	AGGATGGAAG	AAAGCACGAC	AAGAAGGAGG	240
TTATCGTTCT	GAAATCACAT	ACTGCCGGAG	GCTACTCGAG			280

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

GAATTCGGCC	TTCATGGCCT	AGCAGTAAGC	CAGGATTGCA	CCACTGCACT	CCAGCCTGAG	60
TGACAGAGTG	AGACTCTGTT	TCAAAACAAA	ACAAAAAACT	TTACAGCAAT	CCTGGTCCCT	120
ACCATGGAGC	ATGTGTTACA	GGAAAACAGC	CAGTCCACTC	TGCAACCAAT	TTGGACATGG	180
CCCTGAAAAT	CCTTTTGGCA	CAGAAAGGGG	AAAATAAGAG	TACTGGCAGA	AAGTCAGATG	240
CTGGGGATGC	CTCACCTCT	AGTCTCATGA	CTATCACACA	TGAGACGGTG	TTCCGCTGTA	300
ACTTTTCCCC	CCCCCCCCCC	CGTTGTGGA	TCTGAATCTG	GAAAAGAGCT	TGGAGAGATT	360
TACAGGCCTC	CTCTTCTGCA	ATCAGTAAGA	GTACCATGTG	GAGGCAGAGA	GCCAGAATAG	420
GTTGTGGGGC	TTCTCGAG					438

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC	TTCATGGCCT	AGAACAGCTC	TCCAATTCAC	ACTTATCTGT	ACAATGTACA	60
TTAATAACTA	ATTTGTTAGA	TGATTAATAC	CAATAATTAA	CTTGCTAGAG	GACCCAGGAA	120
ACAGAATATC	TGCAAGGCCC	AGAGTAGATC	ATAAATAAAT	AGGAATGCAG	ACATAAGATG	180
TTCACTTTTG	GAACAGTAAA	GCTATAATGA	GTTTTCTTTA	AAATCAAACA	ATTGTACAAT	240
GCATTATAGT	CTACAACCTA	TTCTGTAGTT	CAAATAAATA	AAACTTTCCC	CTGTTACAGA	300
AAGACAGCCC	TCCTCCCAGC	AACATTTCAG	ACTGGATGGA	TTGATTCCCT	ACCTGACATA	360
ACTCTAAAAT	CCTCACTGAA	GAAGCCAGGA	AGTCAAACCTG	AGGCTGAAGA	CCTGAAAGTA	420
CAGGGGACTA	AACCCAGAAA	GCAGTAGGCC	ATGAG			455

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC	TTCATGGCCT	ACATGGACCT	CCTGCACAAG	AACATGAAAC	ACCTGTGGTT	60
CTTCCTCCTC	CTGGTGGCAG	CTCCCAGATG	GGTCCTGTCC	CAGGTGCAGC	TACATCAGTG	120
GGGCACAGGA	CTGTTGAAGC	CTTCGGAGAC	CCTGTCCCTC	ACCTGCGCTG	TGAATGGTGA	180
GCCCTTCAGT	GGTTATTTCT	GGACCTGGAT	CCGCCAGNCC	CCCGGGAAGG	GCCTGGAGTG	240
GATTGGGCAA	ATCAATTATG	ATGGAACCAC	CAAGCACAAC	CCCTCCCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC	TTCATGGCCT	AAGGGTGGGC	TTAATGGCA	GCTGGGGTAA	AAGGAAACAA	60
AAACAGTAAT	TCTGAAGAGC	ACAGGGAACA	GGCAGCCAGG	ACCAGCCTGG	CCCATTCCAG	120
GCCAGCTGAG	CTGAAATGCT	GATTCTGTCC	AGGGGGCTGC	TGTATGTGTA	GACTGGTGGC	180
AGTCTTGGGG	ACTGAGGCCT	CTTGGAGAGA	AGGGAAGACT	GTCGGCTCAG	AAGTCCATGG	240
AGCTGTGGGC	CAGGTAGTCC	TTGCGACCGA	TGTTGCTGAC	CTGCTTGCTC	TGCATAGCCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GAATTCGGCC	TTCATGGCCT	ACCAGCTCTC	TTCTAAAAGA	GAAGTGGGTG	GGCACACTGA	60
ACTGTTTGGT	GGCCCCAACC	ACAGGAAGCT	GCAATTCTCT	GGCTTAGGGT	GATACTTTTG	120
CCCTCCTTGT	GCCCCCTCTC	GGACGCTCTG	CACCAACCCC	AGGCTACTGA	GCCACCTTCC	180
CTCCTCATGC	CTTCCCTGAG	CTTTGGTGCA	TCTCATCTGG	ACTATGGGTT	GTACTGTGAC	240
CATCCCAACA	CCTCACCTC	TGTCTACAAG	GAAATGGGAG	GTGGAGCCTC	CTGGCTGAGA	300
AATTGTTTGT	CAAATGGATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GAATTCGGCC	TTCATGGCCT	AAGCTCATCA	ACGAGAAGCT	CATCAGAACC	AAGGGGCTGT	60
GGGGCCCCGT	CCATGAGCTG	GGCCGCAACC	AGCAGCGGCA	GGAGTGGGAG	TTCCACCAC	120

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ACACCACCGA GGCCACCTGC AACCTGTGGT GTGTGTATGT GCATGAGACG GTCTTGGGCA      180
TTCCTCGAAG CCGTGCCAAT ATTGCTCTGT GGCCCCAGT TCGGGAGAAG AGAGTCAGAA      240
TCTACCTGAG CAAGGGTCCC AATGTGAAAA ACTGGAATGC ATGGACCGCA CTGGAAACTC      300
GAG                                                                    303

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(2) INFORMATION FOR SEQ ID NO:478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

```

GAATTCGGCC TTCATGGCCT AGTTGTTTCTAG AATCCACACA GCTCTGAATT ACCAACGCTG      60
AATTTCCAAG ATACTGTAAA CACCCTGACC AACAGTCCAG CCATCCCATT GGAAACATCT      120
GCATGTCAGG ACATACCCAC TTCTGCCAAT GTACAAAATG CAGAGGGTAC CAAATGGGGA      180
GAGGAGGCAT TGAAAATGGA TCTTGACAAT AACTTTTATT CAACTGAGGT GTCAGTTTCT      240
TCCACTGAAA ATGCTGTCAG TTCTGACCTC CGGGCAGGGG ATGTACCTGT TTTATCTTTG      300
AGTAATAGCA GTGAGAATGC CGCCTCTGTG ATCAGCTCGA G                          341

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(2) INFORMATION FOR SEQ ID NO:479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT AAGTTTTGAA AAAAAAATC TTTAAGTGGA TTGTGAGTAG      60
ATTTTTTTAA GGAGCATTTT TATAATATTT TTCTGAATC CTTGCATATT TGACAGTGTC      120
TTTCTATTGT GTTTATGTGT GGCAGCAATT TACTTTATAT CAAAGTTTTT TGTTTTTGT      180
TTTGTTTTGT GAGACACAGT CTCACCCTAT CACCCAGGCT GGAGTGCACT GGCACATCT      240
CGGCTTACTG CAGCCTTGAC CTCCAGACT CAAGTGATCC TCCACCTGC CTCGAG          296

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(2) INFORMATION FOR SEQ ID NO:480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATA CATTAGTTCCC TTTGCCGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300

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CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA 360
CTTACCCATG GGAAGTCGAG 380

(2) INFORMATION FOR SEQ ID NO:481:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GAATTCGGCC TTCATGGCCT AAGTTTGGAA AAAAAAATC TTTAAGTGA TGTTGAGTAG 60
 ATTTTTTTAA GGAGCATTTT TATAATATTT TTCCTGAATC CTTGCATATT TGACAGTGTC 120
 TTTCTATTGT GTTTATGTGT GGCAGCAATT TACTTTATAT CAAAGTTTTT TGTTTTGT 180
 TTTGTTTTGT GAGACACAGT CTCACCTAT CACCCAGGCT GGAGTGCAT GGCATATCT 240
 CGGCTTACTG CAGCCTTGAC CTCCAGACT CAAGTGATCC TCCCACCTGC CTCGAG 296

(2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC 60
 ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATA CACAGTTCCC TTGCGGAGA 120
 ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA 180
 AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA 240
 GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA 300
 CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA 360
 CTTACCCATG GGAAGTCGAG 380

(2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

GAATTCGGCC TTCATGGCCT AGGCTGGACA GACTTTCTAA TGAACCCAAT GGTTATGATG 60
 ATGGTTCTTC CTTTATTGAT ATTTGTGCTT CTGCCTAAAG TGGTCAACAC AAGTGATCCT 120
 GACATGAGAC GGGAAATGGA GCAGTCAATG AATATGCTGA ATTCCAACCA TGAGTTGCCT 180
 GATGTTTCTG AGTTCATGAC AAGACTCTTC TCTTCAAAT CATCTGGCAA ATCTAGCAAC 240
 GGACAGCTCG AG 252

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

```

GAATTCGGCC TTCATGGCCT ACTACATCAA GCACCAGAAC CGCCAGCTGC GCGCCCTGTT      60
GCTCAGCCAC CAGTTCAAGC GCCGGGAGGC CGACCAGACC CACGCACAGA ACTTCTCCTC      120
CGCCGTGAAG TCCCCGGTCC AGGTCATCCT GTCGGTGCC CTCGCCTTCC TGGCCTGCGC      180
CFTCCTACTG ACCACCGCGC TGTATGGGGC CAGCGGACAC TTCGCCCCAG GCACCACTGT      240
GCCCCTGGCC CTGCCACCTG GTGGCAATGG CTCAGCCACA CCTGACAATG GCACCAGGCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATAC ATCAGTTCCC TTTGCCGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GGAACCTGAG                                     380

```

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATAC ATCAGTTCCC TTTGCCGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GGAACCTGAG                                     380

```

(2) INFORMATION FOR SEQ ID NO:487:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```
GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATAAC ATCAGTTCCC TTGCGGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GGAAGCTCGAG                                     380
```

(2) INFORMATION FOR SEQ ID NO:488:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 380 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```
GAATTCGGCC TTCATGGCCT ACAGAGATGG ATTATCCTAC TTTACTTTTG GCTCTTCTTC      60
ATGTATACAG AGCTCTATGT GAAGAGGTGC TTTGGCATAAC ATCAGTTCCC TTGCGGAGA      120
ACATGTCTCT AGAATGTGTG TATCCATCAA TGGGCATCTT AACACAGGTG GAGTGGTTCA      180
AGATCGGGAC CCAGCAGGAT TCCATAGCCA TTTTCAGCCC TACTCATGGC ATGGTCATAA      240
GGAAGCCCTA TGCTGAGAGG GTTTACTTTT TGAATTCAAC GATGGCTTCC AATAACATGA      300
CTCTTTTCTT TCGGAATGCC TCTGAAGATG ATGTTGGCTA CTATTCCTGC TCTCTTTACA      360
CTTACCCATG GGAAGCTCGAG                                     380
```

(2) INFORMATION FOR SEQ ID NO:489:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```
GAATTCGGCC TTCATGGCCT AGGTTTACAG GCATACCTCA TTTTATTGCA CTTCACTTTA      60
TTGTGCTTTG CAGATAATTG TGCTTTTAC AAATTGAAGG TTAGTGGCAA CCCTGTGTTG      120
AGCAAGTTCA TTGGCAACAT TTTTCCAACA GCATGTACTC ACTTGTCTCT ATGTCACATC      180
TTGATAATTT TCATATTTC AACTTTTCA TTATCATGAT GATGATTAGT GATCTTTGTT      240
ACTGTNGTAG TTGTTTGTG GGCACCAAC TGTATGCAGN AAAGCTCGAG                                     290
```

(2) INFORMATION FOR SEQ ID NO:490:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```

GCTACCTTAA AAAATAGATA CTCCACTAGA GGCTGTGCTT AATTCAAATC CATGTGTGTG      60
CCTGCATTAC ATGTGTGAAC ACGTGTCTTCT GTCGTGTGTG TCATGCACAT CTGTGTGTTG      120
CATAGCATAA GCCAAATGAA AATCATTTGT TCATGGGATT CATATGAGGA ACAAATTTAA      180
ATTTGAATAC AGTCAGATAA CTGCCACGCA GGGCATTGTT GGAACCATCC CCGAATGCCC      240
TGATGTGATT TCCCTCAGAA AATCCTTGTT ATTAGAGGAG AAGGTCTGGG CAGGGGCAGC      300
AGCATCTCAG ACATCAAGTC AACTTTATCA TCTACTACAT CAGCACTGAA GTCCAACGGC      360
ATCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:491:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

```

GAATTCGGCC TTCATGGCCT ATGCTTTTTT CTTTATTCTT TGTAAGTTGTT TAGGAGTGGG      60
GGGCGCTCGCA GAACACCTAG TCCAGCCAC TGCCAGAGC AGGTGTGTCC CTTTCATAC      120
TCAGTCCACT TTAAACAGC CTTCCCCAC CCCCTTCTAT GGTAGCAGTT CTCCTCGGGG      180
TCTCCATGGA CACCCTGTGC CCCAAGCCGA TGGCCCCACC CAGCAGCATC AGCACAGCTG      240
CCCCCTTCT CCGCAGAGCA GGCTCTCCTT TACGGGACTC TCCTCTTCCC TCCCACCCCC      300
CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:492:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

```

GGAATAAGAA GAGAAAGCCA AGGAAGACAA GGGCAAACAA AAGTTGAGGC NGCTTCACAC      60
ACACAGATAC GGAGAANCCA GAAGTGCCAG AGTCAGCATT CTGGAAGAAA ATCATAGCAT      120
ATCAACAGAA ACTTCTAAAC TATTTTGCTC GCAACTTTTA CAACATGAGA ATGTTAGCCT      180
TATTTGTGCG ATTTGCTATC AATTTCATCT TGCTCTTTTA TAAGGTCTCC ACTTCTTCTG      240
TGGTTGAAGG AAAGGAGCTC CCCACGAGGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:493:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 301 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GCCTTGGGCC	CTCGCAAAGT	CTTGAGAAG	CAGTTTACT	TCCCTTCCTT	CACTTAGACC	60
CCATTCTTTA	GCATTCTTC	TGAAGCTCCC	ACAAGACCCA	AGAATGGCTG	CTGCAGTGTC	120
TCCTCTTCAG	TCAGGGACCC	TGGTTGAGGT	TTGTGTATTG	TTCATTATTG	CTCTGTTTTG	180
CAGTTGTTCA	AAGTTGGAAG	ACTGCCTGC	GGAGCAGTGG	AACCATGCCA	CAGTCCGCAA	240
TGCCTTAAAG	GNACTGCTCA	AAGAGATGAA	CCAGAGCACA	TTAGCCAAAG	AAACCCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 389 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

GGAAGATGTC	TACAGAAAAG	GTAGACCAAA	AGGAGGAAGC	TGGGGAAAAA	AGAGTGTGCG	60
GAGACCAGAT	CAAGGGACCG	GACAAAGAGG	AGGAACCACC	AGCTGCTGCA	TCCCATGGCC	120
AGGGGTGGCG	TCCAGGTGGC	AGAGCAGCTA	GGAACGCAAG	GCCTGAACCT	GGGGCCAGAC	180
ACCCTGCTCT	CCCGGCCATG	GTCAACGACC	CTCCAGTACC	TGCCTTACTG	TGGGCCCAGG	240
AGGTGGGCCA	AGTCTTGGCA	GGCCGTGCCC	GCAGGCTGCT	GCTGCAGTTT	GGGGTGCTCT	300
TCTGCACCAT	CCTCCTTTTG	CTCTGGGTGT	CTGTCTTCCT	CTATGGCTCC	TTCTACTATT	360
CCTATATGCC	GACAGTCAGC	GCACTCGAG				389

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 438 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

GTGGCGATTG	GTCCTGTCAT	GGTTTATTCA	GCCATGTGGT	GGATGGCTAC	TTGTCTTCTA	60
AGCCACTTGC	CTTCTGATCG	CTGGACTGAC	TCTCTCGCCC	TCTCTTGTTG	CAGTCCTCAG	120
GAGGCTCGGT	CACACTCTCC	AAGAGCACAG	CCATCATCTC	CCACGGTACC	ACAGGCCTGG	180
TCACATGGGA	TGCCGCCCTC	TACCTTGCG	AATGGGCCAT	CGAGAACCCG	GCAGCCTTCA	240
TTAACAGGTG	ACCTCGGGGC	ACAGGGCAGG	GCACCGAGGC	AGGCTTACCC	TGGTGCACTC	300
GAAAACACGG	TCCCCTTTCC	TCCCGCCAGG	ACTGTCCTAG	AGCTTGGCAG	TGGTGCCGGC	360
CTCACAGGCC	TTGCCATCTG	CAAGANGTGC	CGCCCCCGGG	CATACATCTT	CAGCGACCCT	420
CACAGCCNGG	TCCTCGAG					438

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

GAATTCGGCC	TTCATGGCCT	AGGTAAAATT	TGTATAACAA	AAAATTAACC	GTTTTAAACT	60
GAATAATTCA	GTGAGATTTA	GTGAATTCAC	AATATTGTGC	AACTGCCACC	TCTTTCTACT	120
TCTAAACCAT	TTTCCTCATA	CCAAAAGTAA	GCCCCGTACC	TATGATGCAG	TCCCTTCCCG	180
TTTCCTTCTC	TCCTCAGTCC	CTGGCAACCA	TCACTCTGCT	TTCTGTCTCT	GTGGATTAC	240
TTATTCTAAT	ATTTAATTTC	AGTGGGAATC	CCTGCCTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

GAATTCGGCC	TTCATGGCCT	ACACTTAGAG	AGGCAGTCGG	GATGGAGGGT	CGAGTTGAAG	60
ACAGGGAGGG	GTGAGGAACG	AGCAGAGGCC	AGTTGTTTGG	CCACTTGAGG	GAGTTTGGAC	120
TTGTCCCGAG	GGCACTAGGG	AGCCGTGAAG	GGCTTCAAGC	CGGGGAGGAT	CATGAACATT	180
TCCCCAGAGG	AGCTCAAAAT	GGAGTTGCCG	GAGAGACAGC	CCAGGTTTCGT	GGTTTACAGC	240
TACAAGTACG	TGCATGACGA	TGGCCGAGTG	TCCTACCCTT	TGTGTTTCAT	CTTCTCCAGC	300
CCTGTGGGCT	GCAAGCCGGA	ACAACAGATG	ATGTATGCAG	GGAGTAAAAA	CAGGCTGGTG	360
CAGACAGCAG	AGCTCACAAA	GGTGTTGAA	ATCCGCACCA	CTGATGACCT	CACTGAGGCC	420
TGGCTCCAAG	AAAAGTTGTC	TTTCTTTCGT	TGATCTCTGG	GCTGGGGACT	GAATTCCTGA	480
TGTCTGAGTC	CTCAAGGTGA	CTGGGGACTT	GGAACCCCTA	GGACCTGAAC	AACCAAGACT	540
TTAAATAAAT	TTTAAATGTC	AAAACCTCGA				570

(2) INFORMATION FOR SEQ ID NO:498:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

GAATTCGGCC	TTCATGGCCT	AGGTGCATGC	CATCAAATAC	TCTAACGAGA	CATTTTAAAT	60
GAAAGACTTA	AACCAGATAG	GCCACAATGA	ACCAAATTAG	AAATCTGAAC	ATGTCACCAC	120
TTGCAGCATA	AAGGAATATA	AAAGGGCAGA	GCAAAGTCTT	TTTTCTAAG	GTGAATATTT	180
CTAAGGTAAG	TATTCATTTG	TAAAAGTTTT	TTTTTTCCAN	CANGTCTGAA	NNCTTTTAC	240
CANNNGNGA	GNATTACAAC	AAAACATCCC	TNGGTAAAAA	AAAAAAAATA	CCATCTTGCA	300
ATTGAGCACA	CACCNGCAGC	TGGTGTGCTC	ATCCAAACCN	ATCAGTAGGC	TAAGAGNATT	360
TNAAATTCCA	TACATATGAG	TTAGGTATT	AATGCCGATT	ACACAGTACA	CAGTACAGAG	420
GGAGGTCCT	ATATCCACAC	ACACACACAC	CCCATCCAGC	ATTACACCN	AAAGCCTTAC	480
CCTCGAG						487

(2) INFORMATION FOR SEQ ID NO:499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT AACAAATCAA AGAAACTTTT TTCTGAACCA TTTGAAATTT      60
GCCAGCCTGA TGTCCCATCA CCCCCCAAGT ATTTTAGCAT CTATGCAACA AAACATTTTC      120
TCTGACAAAA CCACATCAGA ACTCTCAAAT CAGGAAACAA ACATTGATAC ATGTCTATCA      180
ACTAATCCTG TCTTCAATGA CATTTTACCG ATTGTTCCAA TGATGTCAGC ATCACGGGTC      240
ACATTTAATA GTTGCCTCCT TCAGTCTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GCACTTCTGG ATGTTGGTTC TCTTTGTCAT TTCAACAGT CTGCAGGGAC TTTATGTTTT      60
CATGGTTTAT TTCATTTTAC ACAACCAAAT GTGTTGCCCT ATGAAGGCCA GTTACACTGT      120
GGAAATGAAT GGGCATCCTG GACCCAGCAC AGCCTTTTTC ACGCCCGGGA GTGGAATGCC      180
TCCTGCTGGA GGGGAAATCA GCAAGTCCAC CCAGAATCTC ATCGGTGCTA TGGAGGAGGT      240
GCCACCTGAC TGGGAGAGAG CATCCTTCCA ACAGGGCAGT CAGGCCAGCC CTGATTTAAA      300
GCCACGTCCA CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GACAAAGACC AGCAATGGAT CACTTGGAGT CCTTTATTGC TGAATGTGAT CGGAGAACTG      60
AGCTCGCCAA GAAGCGGCTG GCAGAAACAC AGGAGGAAAT CAGTGCGGAA GTTCTGCAA      120
AGGCAGGAAA AGTACATGAG TTAAATGAAG AAATAGGNAA ACTCCTTGCT AAAGCCGAAC      180
AGCTAGGGGC TGAAGGTAAT GTGGATGAAT CCCAGNAGAT TCTTATGGAA GTGGNAAAAG      240
TTCGTGCGGA GGAAAAAGGA GNACTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAATTCGGCC	TTCATGGCCT	ACTTGTCTCA	CTCTGCATCA	TCCCTTAGTC	TACAACAGGC	60
CTTTTCTGAA	CTTAGACGTG	CCCAAATGAC	AGAAGGACCC	AACACAGCAC	CTCCAAACTT	120
TAGTCATACA	GGACCAACAT	TTCCAGTAGT	ACCTCCTTTC	TTAAGTAGCA	TTGCTGGAGT	180
CCCAACCACA	GCAGCAGCCA	CAGCACCAGT	CCCTGCAACA	AGCAGCCCTC	CTAATGACAT	240
TTCCACATCA	GTAATTCAGT	CTGAGGTTAC	AGTGCCCACT	GAAGAGGGGA	TTGCTGGAGT	300
TGCCACCAGC	ACAGGTGTGG	TAAC TTCAGG	TGGTCTCCCC	ATACCACCTG	TGTCTGAATC	360
ACCAGTACTT	TCCAGCGTAG	TTTCAAGTAT	CACAATACTC	GAG		403

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 282 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GTTTGGATGA	TTGGTGGCGT	GTACGCAGCT	GCTATGGCCT	GGGCCATCAT	CCCCCACTAT	60
GGGTGGAGTT	TTCAGATGGG	TTCTGCCTAC	CAGTTCCACA	GCTGGAGGGT	CTTCGTCCTC	120
GTCTGCGCCT	TTCTTCTGT	GTTTGCCATT	GGGGCTCTGA	CCACGCAGCC	TGAGAGCCCC	180
CGTTTCTTCC	TAGAGAATGG	AAAGCATGAT	GAGGCCTGGA	TGGTGCTGAA	GCAGGTCCAT	240
GATACCAACA	TGCAGCCAA	AGGACATCCT	GAGCGACTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 222 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GAATTCGGCC	TTCATGGCCT	ACTGAGAAAA	AAAATCAAAT	CTAATTTTAA	AATGAAGGTA	60
TTTAAACCA	TGGCACAAGG	GAGCCTTATT	TATGGAGCTG	GTGGGAAGCC	AGGATGTTTC	120
CAATCCGCTG	CTCTTACAGG	AGCCTGTGCC	TCGCCAGTTC	TGTGCTGCAG	TGGGCAGCCA	180
ACTGAAGTGC	ATGAGTCAAA	TGCACGAAGC	AGCAGACTCG	AG		222

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 192 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

GAATTCGGCC TTCATGCCCT AGTGGTGCAG TTTTTCAGGA TTGTAGAGAT GCTAACAAAT	60
TACAGGTTCT CTCATGCAA CACTTTGCTA GGAATTATAT ATATCAAGTT TATATTTGGC	120
AATCAGGCTT TAGAAGCAGA AGGTCTAGCT ATCTCAAACCT ACCACCTACC TCCCTCACCA	180
AAGCCGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

GAATTCGGCC TTCNTGGCNT AGTAAAATTG TTAAAGTTGA CAGGATCAGT TTTGGAAGAT	60
GCTTGGAAGG AAAAAGGAAA GATGGATATG GAAGAAATTA TTCAGAGAAT TGAANACGTT	120
GTCCTAGATG CAAACTGCAG TAGAGATGTA AGACAGATGC TCTTGAAGCT TGTAGAACTC	180
CGGTCAAGTA ACTGGGNCAG AGTCCANGCA ACTTCAACAT ATAGAGGNGC NACACCAGAA	240
AATGATCCTA ACTACTTTAT GNATGNACCC ACATTTTATA CATCTGATGG TGTTCCTTTC	300
ACTGCAGCTG ATCCAGATTA CCANGAGAAA NTCCAAGAAN NACTTGAAAG AGANGATCCT	360
CGAG	364

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

GAATTCGGCC TTCGATTGAA TTCTAGGACT TGACAGAATT CGAGTTATCC TTCTCAGAAC	60
ATGTGCAGAG TCTCTTTTTG CCTCACCATG TGGTCCTGTG CTCTTTCAGG TGGGAGTTTT	120
GGGGCCTCCA GGGCAGCAGG CACCACCTCC ATATCCCGGC CCACATCCAG CTGGACCCCC	180
TGTCATACAG CAGCCAACAA CACCCATGTT TGTAGCTCCC CCCCAAAGAC CCAGCGGCTT	240
CTTCACTCAG AGGCCTACCT GAAATACATT GAAGGACTCA GTGCGGAGTC CAACAGCATT	300
AGCAAGTGGG ATCAGAGCAA TCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```

GAATTCAGTG AGTGGGCATG GCTGATCTTG TGCAAATTAA AAGTTATGGG GCATAAGAAT      60
AGCAAAAGTT GAACTTCTTT TAAAAAGGAA AGTACCCTGA GAGCCAGTAT TGGTTGAGGC      120
TCTTCAGTAT GCCCAGGTTG GCAGCACTGA GAACCGCAGG AACGGCCTGT TGTTACAAAA      180
AGGAGATTGA CTCAGCTGCC CTTGGTGCAT CTGACTGACT ATGACTGCTG AGAGATTCCA      240
AGGACCCTTA ATGCCAGGGC TAACCTCTCC ATGTGCAGTG AGACCTCTGG AGGAAGTGTC      300
ATCCTCTGGC TTTGTGTGGT ACTCATTATG GTGCAGTGCG GGCATGAAAT GAAGACACAC      360
AAATAGGCTC GAG                                     373

```

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```

GAATTCGGCC TTCATGGCCT ACTCTTCCTG GTCCTTCTC AGCCTTGTTG CTGTAAGTGC      60
TGCTCAGTCC ACCATTGAGG AACAGGCCAA GACATTTTTC GACAAGTTTA ACCACGAAGC      120
CGAAGACCTG TTCTATCAA GTTCACTTGC TTCTTGGAAT TATAACACCA ATATTACTGA      180
AGAGAATGTC CAAAACATGA ATAATGCTGG GGACAAATGG TCTGCCTTTT TAAAGGAACA      240
GTCCACACTT GCCCAAATGT ATCCACTACA AGAAATTCAG AATCTCACAG TCAAGCTTCA      300
GTGCAGGCTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

```

GAATTCGGCC TTCATGGCCT ACTTGAACAA TTAAATATA GGAGAAGACT ATTTTITAGA      60
AATGTTTTCC GTCGCCAACT TGTTAAAGCT TTATAGCACT TTGCATATTT TGGAGAATGT      120
CAACTATATT TTTATCAGAG CTGATTTGTT CCAAGTGAAC AACAGTGGCG TAGACATCGC      180
CCACAAGGTT CTGCATACTC GAG                                     203

```

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```

GAATTCGGCC TTCATGGCCT ACGTGGTATT AAGGAGACAA TCTGAGGCAT TCCCACCAGT      60
CAATTTGACA TGCGGTTGGC AAGGTTCTCTC TTCCCTTCCC ACTTTAGATC GTGCCCTGTC      120

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CCAGGTCAGA	CCCGAAAGAT	TCATAGGCAC	ACTTACAGCC	TTCATAGTCT	CAGCCATAGT	180
CATCCTAGCA	ACTGCTAGTG	TGGCTGTAGC	ATCTATTACT	GAATCAGTAC	AAACAGCTGC	240
TTTTGTAGAT	AATTTGGCCA	GAAATGTTTC	TAATGAACTT	CTCTTACAGC	AAGGTATAGA	300
TCAAAAGATT	CTTGACATC	TGCAAGCCCT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:512:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 537 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

GAATTCGGNC	TTCATGGCCN	AAAGCTCTNG	AAGGAGTATT	AGAGTACAGA	GTCTGAGNCT	60
NTGANAAATG	GTGGTCAGAA	GCCNTCTTCA	TCAGATANAT	TTCTCAGATG	TGCCCCTTCC	120
GCGGCAGAGG	NGGATATTCA	TCTCCTAGTT	CATGTTCAGA	AACATGTCAG	TANGCAGATN	180
ANTCACTACC	AGTATCTGCT	TCTACTTTTC	CTGCATGAGT	CACTTATCCC	TGCTTTTCAGA	240
GAACNTAAGG	AAAGATGTAG	AAGCTGTAAC	TGGCAGTCCT	GCTAGTCAGA	CATCCATTTG	300
TATTGGAATT	TTACTTAGAA	GTGCAGAACT	GGCTCTTTG	CTCCATCCAG	TGGATCAAGC	360
AAATACTCTT	AAGTCTCCTG	TTTCTGAAAG	TGTGAGCCCA	GTGGTACCTG	ANTATTTGCC	420
TACAGAAAAT	GGGGATTTT	TGNCCTCAA	AAGAAAACAA	ATTAGTAGGG	ATATAAATAG	480
AATTAGAAGT	GTAACGTGTA	ATCATATGTC	AGACAACAGA	TCTATGAGTA	TCTCGAG	537

(2) INFORMATION FOR SEQ ID NO:513:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCGGCC	TTCATGGCCA	AGGTGCTTAA	TATTAACAAA	AAAAAAAGTA	TATCCAACCA	60
CAGATATACA	GTTCTGCCTT	TTTTTCCTTT	TTACCTAAAT	ATACTCCATA	AACAGTTTCC	120
ATGTTGTGTA	ATATCTTCAT	GTTTCTACTT	TTCAGTGATT	GCTTAAATGT	CCATTGGGCT	180
GATAGGTCAC	AGTTGCTTAA	CCCATCTCAT	TGTTGTTTCT	TGGGATCTCC	ACTTTCCTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:514:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCGGCC	TTCATGGCCT	AGTCTCAAAA	AAAAAAAAAA	GATTATCCAC	AAATGCAGTG	60
GNCCCTGGGA	CAAGCCCTTT	AAAGGAGTCA	TNGAGAATCG	TCTGTTGCTC	ACAGCATCAA	120

TCNGGTATTT AGTTCTCAAG CTTGAGGATT CTAGTTTTGC TCAGAGGGTC GGGTTCAGTC	180
TCTAAAAGAC GCTCTGAAAG CAGACCAGGC TGTTCCTTGG GAGCTTTTCA GGTTAGATTC	240
TCATGTGTGT ATCTTCCATC TACCACGATT ATTTGGCTAC CAGATGCCTT AGCAAGCTGA	300
ACAGTGAGCT CAGAAGTGCC ACCATCTATA GTAACATTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GAATTCGGCC TTCATGGCCT AAGAGTATCC GCTTACAGAA AAGACACTTC ATCACCTAGC	60
ACTGATTTAT GCAGCTTTGG TTTCAATTTGG GCTAAACTCT GAAGAACTGG ATGTAAAGCT	120
TATAATTGCC CCAGGAGTAG AAGCAACTGC CTTGATAATT CGACAAATTG CTGACCACAG	180
TTTAATGACC TCAAAGAGAG ATCCTCATGA ATGGTTGGAT AAATCCTGGC TTAAAGTTTC	240
ACCATCTGAG GAAGAAATGT ACTTACTTGA TTTTCCATGT ATTAACCCAA TCGTGGCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AATCCATAAA	60
AGGCTTTTGA GATGTCTCTG CTGAAAATAA ATGGAGCTCT AGTAAATGTT AGAGTTTTTG	120
CTAGTAGAGT TTTGATGCTT TTTGTCTTTG TTCTACTACT GAGCTTGAC CTAGGATGCC	180
TTCTTATAGT GCCATTCAAC ATGCAAGTTT CTTTTTCTGG GGCTGTGTGT CCAGGTGACT	240
TTATGAGTTA GGCTTTGGCA AATGCCAGAC TTGTTCATCC TAACACTAGA ATGTAGGGAT	300
CCTGCATTCA GCATGACCCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

GAATTCGGCC TTCATGGCCT ATAGGCCANG AAGGCCGGCC TTCATGGCCT ATAGGCCATG	60
AAGGGTTGGT TGTGTTTTCC TAACAATGAA TAAGACAGAA ACCCTTGATA GCTAAATTCA	120
TCTGCAGTCA AACTAAGTTT TGCAGTGTCT TTTTAAGAGC CAGGCAATTC TACCACAAAA	180
TAAAATATAT TTTTAAATC CACATTACTA TACCACTGAC AAGTCTTTAC TTCAGAACTC	240

ATCATTCAGA AATGTGTAGC TGCTTCCAGA GTGTGTCTAA TACTGTTGGA ACAGGCGTTT	300
CAGAAAGAAA TGAGAGGCC AGTCTCAGTA ACTCCATGAA GGGTGCCGAG CTCCTCTGTT	360
GAGGATTGG CTTGTGAGAG GCAATGTTCC TATCATTTGC CAATTTGGCC TTTGTTATTC	420
CCACATTGGC TCGAG	435

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

GAATTCGGCC TTCATGGCCT ACCAGGTTGG CCAGGCTGGT CTCGAACTCC TGACCTCAGG	60
TGATCTGCTC ACCTCGGCCT CTCAAAGTGT TGGGATTACA GGAGTGAGCC ACCGCACCGG	120
GCCAAAAAAT CCAATTTCTT AGAGATTAAA TAACCCTTCA GGATTATCAA AGGAAATAAT	180
TAGGGAAAGG TAGATGTTCT GTCCCAAGTAA GAGAAGAAAG TGGTCCAGAA ATTTTATCTC	240
CCATCAAATG ATCCATTTTA CTTAAGTATT AAACCAAGTG ACATTCTTCA GTTTAACTCT	300
GATAAATGAA TCATATTCCT CTTCGAAAAT AACTTTTGTA TTTCGTGCTC TAAAAAGAGA	360
ACCACCCCTC GAG	373

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCGGCC TTCATGGCCT AAACAATTAA TTGTGGGTGT CTGAGGGGGA AGGTTCGCAGC	60
TTTGGGCAGC TTTGAGAAGC GGTACAAGAG TTCTGTGCCT GTGTGTCCAG CCCTGGAGCC	120
AGCCAGTGCA TTTATTTTAA GCTCTTAGAA GCAACTCCTT GGCCAGGAA TCGTGACCC	180
CTGAGATGGG TCCACGCATC TCTTACACT TCCTTCTCTC CGTGGGATAC TGGACTCGTG	240
CCTCTGCGCC CATTCTCTTC TCACGCATAT CCATGAGCTT TAATTCACT TTCTGATCAC	300
GGTACGTCCA TAAAGCCAGT ATTACACTTA AATGAAGTAT TCTTTTGT AATCGTTTTT	360
TTTAGAAGGT AAACAAATTT AATAAAGCTA TCTCGAG	397

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

GAATTCGGCC TTCATGGCCC ACATGAATCT NGTAATTTGT GTCCTACTTT TGTCCATTG	60
GAAAAATAAT TGCATGACTA CAAACCAAAC CAATGGATCT TCTACTACAG GAGATAAACC	120

TGTGGAATCA	ATGCAGACAA	AATTGAACTA	CCTTAGAAGA	AATCTACTCA	TTTGTGTTGG	180
TATTATCATC	ATGGTTTTTG	TCTTTATCTG	TTTTTGTTAT	CTCCATTATA	ATTGTCTGAG	240
CGATGATGCG	TCCAAAGCAG	GAATGGTCAA	GAAAAAAGGC	ATAGCAGCCA	AGTCATCTAA	300
AACATCATTC	AGTGAAGCCA	AGACAGCCTC	TCAATGCAGT	CCAGAAACAC	AACCCATGCT	360
ATCTACTGCA	GACAAGTCAT	CTGATTCATC	GAGTCCAGAA	AGGGCATCCG	CACAATCCAG	420
CACAGAAAAA	TTAATCAGAC	CCTCAAGTCT	ACAAAAGCCA	TCCAACCTCG	AG	472

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

GAATTCGGCC	TTCATGGCCT	ACACCTCTTC	TTAGGGCTGT	TTTTTTAAAC	ACAATGATAT	60
TCTAAGGAAC	AAGAGGTTGG	CTATGGACTT	TTGTATACCC	ATGCCTATCA	TATTTCGCTA	120
AATGTTTGAT	TATATAGAGA	CATTCTTTTG	GAACTTTGAG	CTGTGTGAAG	ACAACACAAA	180
CCTGGCCATT	CATGGCTGAC	AGAAGGTTGG	CCCTAACCCCT	GCTCAGGCCC	ACACAGATTG	240
TGTAATATTC	TTTGATCTG	GCTCTAGTCA	GCAAAGTCTT	GGTGTGTAG	GATACAGGTG	300
TCTTCATGCA	TTCCATTTTA	TACTCGAG				328

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GAATTCGGCC	TTCATGGCCT	AGAAAAAGAA	AAAGTAGCTG	ATGAAGATGA	TGTGGACAAT	60
GAGGAGGCTG	CACTGCTGCA	TGAAGAGGCT	ACCATGACTA	TTGAAGAGCT	GCTGACACGC	120
TACGGGCAGA	ACTGTCACAA	GGGCCCTCCC	CACAGCAAAT	CTGGAGGTGG	GACAGGCGAG	180
GAACCAGGGT	CCCAGGCGCT	CAATGGGGAG	GCAGGACCTG	AGGACTCAAC	TAGGGAAACT	240
CCTTCACAAG	AAAATGGCCC	CACAGCCAAG	GCCTACACAG	GCTTTTCCTC	CAACTCGGAA	300
CGTGGAATC	GAG					313

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GAATTCGGCT	TCATGGCCTA	GCGTTGTGTG	CATGCGAGCG	CTCCTGCAGG	CGTGTGCATG	60
GGGCCAGGTG	TGCACGTGGA	TGCCCCGGTG	AGTGTGTGTG	CATGCACGTG	TGTGCACGCA	120

TGTGCACATG	CCTCCAGCCC	CACCTTCCAA	CCCCTCAGTG	CCCCCAGGAC	AGGGGCCCCCT	180
CTTAGCTATC	AGGGTATGGC	CGGACCGGCC	CTTCCTGCCC	AGCANGTTGC	AAGCACTTGG	240
CCAGGCCGGC	CCTCCAGGNT	GCTGCTGCGT	GGGGGCCCCG	GTGCCCCCAG	GTCCATGCAG	300
ACTGGGGATT	CGGTGGGGAG	GGGCGCTTCT	AAGGAACCAA	ACTGACGCTC	ACTCTGGGCT	360
TCCCAAGCAC	CCTTAGCACG	GAGCCACCC	CTAGCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

GAATTCGGCC	TTCATGGCCT	ACCCACCGTG	TAGTCAACCC	CACTCGTACT	GTAGCGAGAC	60
AAAAACATGC	CATTGTGAAG	AAGGGTACAC	TGAAGTCATG	TCTTCTAACA	GCACCCTTGA	120
GCAATGCACA	CTTATCCCCG	TGGTGGTATT	ACCCACCATG	GAGGACAAAA	GAGGAGATGT	180
GAAGAACAGT	CGGGCTGTAC	ATCCAACCCA	ACCCTCCAGT	AACCCAGCAG	GACGGGGAAG	240
GACCTGGTTT	CTACAGCCAT	TTGGGCCAGA	TGGGAGACTA	AAGACCTGGG	TTTACGGTGT	300
AGCAGCTGGG	GCATTGTGT	TACTCATCTT	TATTGTCTCC	ATGATTTATC	TAGCTTGCAA	360
AAAGCCAAAG	AAACCCCTCT	GCCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC	AAAGAGGCCT	AATTGAATTC	TAGACCTGCG	TCGACCGAAC	CGAGTTGTAC	60
ATTTTTTTTG	TGATGGGTTA	TTTTTTATTT	TAATTATTAT	TGTTGTTTTG	GTTTTTTTTT	120
GGTTGGTTTT	NGATTTATGA	CAATNCCACT	CTTGCCCCCA	GTTGTCGTCC	TGTCACCTCC	180
TCCCCTGTCC	ATCACCCTGG	CTCCAGACC	AGGCTCAGCA	ACACATTGAG	TCTTGGGTTC	240
CAGGAACCTT	GCCAACCTCA	ACCCTCCAGC	CCGTGCTCCA	CTGGCTATGG	CTCAGACCAA	300
GGGCTCCTCC	TCTCCNTCT	TGCCCTATGG	AACAGCCCGG	GTGCTCCAAG	GGGGCCAGGA	360
GGGCATGGCT	TGGCTCCCAA	GATAAGGGGT	CCGGGGCCAG	GACACCCAGG	CAAGGTGGCC	420
CCTCCCTGCC	TAGCCCCCTT	CCCCCACC	AAAGTCGAG			459

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

```

GAATTCGGCC TTCATGGCCT ACAACCTGGA AAATTCTCTG ACTTAGAAAT TTAAACAAAA    60
CCCTCCCCTT TCATTGAATC TCCATTGTCT GGAGTTTGCT TGTTTTAATC TAGCCTGTTT    120
CTCCACTATG GGCTCCCTTT CAAACTATGC CCTGCTTCAA CTAACCCTTA CTGCTTTTTT    180
GACAATTCTA GTACAACCTC AGCACCTGCT TGCTCCAGTT TTCCGGACAC TATCTATCTT    240
GACTAATCAG TCTAATTGCT GGTTATGTGA ACATCTAGAT AATGCAGAAC AACCCGAACA    300
CCTCGAG                                           307

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(2) INFORMATION FOR SEQ ID NO:527:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```

GAATTCGGCC TTCATGGCCT ACCAATACTA AGCTTATTTT ATTGTAATAC AGTTATTTGT    60
ACCACCTTAG AGCAATCTTT TGAAGAACAA GAAACACATA TTGAGCCACC ACGCCCAGCC    120
TTTTTTCAGT TTATTTTAA TCTTTTGCTG TTCATTGGCT CATTCTGTGT ATAAGCATGT    180
TAAATTTACC CAAATATGAA AATAGCCTCC CCTTGGCCCT GAACTCCTCT ACAAGCAACT    240
ACCTCATGAT TTTATCTCTT TATCCTCAA TTCTTTGGAA TATAATTTAT ACTTGTTTCA    300
TCCCTACCAC CCTCGAG                                           317

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(2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 405 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GAATTCGGCC TTCATGGCCT ACAGCAGTGT GCTTTCATCC AGTTTGCCAC ACGGCAGGCT    60
GCAGAAGTGG CTGTGAGAAG TCCTTTAATA AGTNGATTGT AAATGGCCGC AGACTGTATG    120
TGAAATGGGG AAGATCCCAG GCAGCCAGAG GAAAAGAAAA AGAGAAGGAT GGNACTACAG    180
ACTCTGGGAT CAAACTAGAA CCTGTTCCAG GATTGCCAGG AGCTCTTCCT CCTCCTCCTG    240
CAGCAGAAGA AGAAGCCTCT GCCAACTACT TCAACTTGCC CCAAGTGGT CCTCCAGCTG    300
TGGTGAACAT TGATNTGCCA CCGCCCCNTG GCATTGCTNC ACCCCCACCC CCAGNTTTTG    360
GGCCACACAT GTTNCACCCA ATGGGACCAC CCCCTNNNAC TCGAG                                           405

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(2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

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GAATTCGGCC TTCATGGCCT AAGAAACCAA ATTAGCAGAC GGATAGAATA TAAAGCAAGA    60

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GGCAATACTT ATAGTGTATT AAGAACTTG CTAGACCCCA TCCAAATTAC TCAGTCTACT	120
GTTGGTTGAT AGAATTACTT TAGGAAGAGT ACGTTTTTGC CTTGGAAATA CACTGGAAGT	180
GGTACCAAAC AAATCTAATA AAATGATGTT AAAGAGATT GCAGTAATTT TTATCAACTT	240
TCAGTTTGCA AACTTTTATA AAGATATGAA CGGGACACTC GAG	283

(2) INFORMATION FOR SEQ ID NO:530:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

GAATTCGGCC TTCATGGCCT TTCTATAAAT GAGTTCTTTA TAAGAAGCTT GTATCATTCT	60
CACAAATTAA AAATAATAAT ATTTTAGCAA GCTATTTTTT AAATATAATT TAAGCCCACA	120
CTTCCACATT TGGGGTAAGT GATAATTTT TCCTCTGAAA GACAACAAAT ACTAACACAG	180
GCCAGACTT GGCTTTTGTG AGTCAATTAG TGATCCGAAG GTGAGTGGTA TTAAACGTA	240
TGATGAGGGT AAGATTGAT TTATTTTACA TATATATCTT CTGGTATCTG TGTGTGTGTG	300
TGTGTGTGTG GAAGCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:531:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GAATTCGGCT TCATGGCTTG GGGGTGACAG TTAATATATN CGGTCATTTT AGATTGCTTC	60
CACTAATATT GGTATTATCCA TATTATAAAA TATTTTAGTG AGTATAAAAT TGTCTGCAT	120
CATAAAGATG CATAAAATTA ACTACAGAAC CAGCTTGAGT AATGCTTTTC TCTTCTTTTC	180
TTCTTGTCAT TCAGATATTA TCTTTATACA TTGTTTTAGA GTATACATCT ATCAAATGC	240
AACATTGTTG AAGGATATGT AATTTATACA GCAAACGTGT AATGGATAAA AATGTGCAAA	300
AACAATCCTT AAAGTATTGT ATTTGAACNA AAACAATCTT AAACCACATA ATCTGAAAAA	360
AAGGGGTACA TATTTTACCA AATATACTAA TCCATACAAG ACTGCTTGAG AAAAAGAATA	420
TGCCACCTAC TCGAG	435

(2) INFORMATION FOR SEQ ID NO:532:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

GAATTCGGCC TTCATGGCCT AAGCCATCAG ATTGAAATTA ATTTAGACAG GAAGAATCTA	60
TATAAATTTG ATGCATAGCA AACTCTGACA TAATTTGGTT TATTTTGAAG TCTGGCATAT	120

TTTTTCATCAC	TTTTTATTTT	ACGGGTAAAT	CATAATATAT	CATATTTTCA	ATAAAAGTAT	180
TTTCTTAAAA	ATCTGCCATT	TGCTTCACAG	ATTTTAAATC	TTCTAACAGA	AAAAGAAGTA	240
AATATTGTTT	TGCCAACACA	GTCCATTGTT	CCAAGAATT	TTGTGCTTAA	ACCAGGAATG	300
GTTCTGTTTT	TGGGTGCTAT	AGGCCGCATA	GCCCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

GAATTCGGCC	TTCATGGCCT	AATGTGCTCC	AGGAGGCGCT	GGGGGATGGT	GACCTCCCAA	60
GGCGGGCAGA	NGACTTCTGC	CGTCAGGGTC	GCCTGCTGCT	GAGCCTGGGG	GATGAGGCGG	120
CGGCCGCAGG	GTCTGGATCC	CCTGTGCCGT	CGCTCTTCC	TTTTTCGACG	CCTCCGCCGC	180
CGCCTGAGGA	GGCGAGCTAG	CCGGGAGTTA	CACCGCCACC	GCCAGGATGG	ATAGAATGAC	240
AGAAGATGCT	CTTCGCTTGA	ATCTGTTGAA	GCGGAGCTTG	GACCCAGCAG	ATGAGCGAGA	300
TGATGTCCTG	GCAAAGCGAC	TCAAATGGA	GGGGCATGAG	GCCATGGAAC	GTCTGAAAAT	360
GTTGGCATTG	CTCNAAAGGA	AGGANTTGGC	AAATCTTGAG	GTGCCACATG	ANTTACCCAC	420
CNAACAGGAT	GGCAGTGGTG	TCAAGGGCCA	TGAAGAAAAA	CTTAACGGGA	ACAACTCGAG	480

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

GAATTCGGCC	TTCATGGCCT	ATATGTATTT	TTAATCTATG	ATGGTTTATG	TGAATAGGAT	60
TTTCTCAGTT	GTCAGCCTGG	GCGACAGAGC	GATACTCCAT	CTAAAAAAA	GNAAAAAAA	120
GAGGTGACTA	GGCCATGAAG	GCTCTGTCCT	CACAGATGGA	TTAATGCCAT	TGTTGTGGGA	180
GTGGTTTTCT	CATTGAAGGA	TGAGCTTGAG	CTTGGCCCCC	TTCTTTCTCC	CGCCTCATTC	240
CCCTCTATGT	NGCCCCTATG	ATGCCTAANG	CCATGTTATG	ATGTGGCAAA	AAGGCCCTCG	300
CCAGATGCCA	GCCCCTTGAC	CNTGGAATTC	CCAGCATCNA	GAAGTGTGGA	CCNAATGNAT	360
GTTTTTTCCT	TATAAANTAA	CCNGCCACNG	GTATTTTGTT	AAAGCNGCAC	CNAGCAGACT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

GAATTCGGCC	TTCATGGCCT	ACGTTGACTT	AATCAGAGGG	TCAACATTTG	CCAAAGCAAA	60
ACCTGAAATT	CCATGGACAT	CTCTGACTCG	GAAGGGGCTT	GTTGAGTTG	TATTTTTC	120
ATTGTTGAGC	AATTGGTGA	TTCAGGTAC	CTCTTTAAGA	ATCTTTGTTT	GGCTGTTACT	180
ACTTTATTTC	ATGCAAGTTA	TAGCAATTGT	CTTATATTG	ATGATGCCTA	TTGTGAACAT	240
AAGTGAAGTA	CTTGGACCCT	TGTGCCTTAT	GCTACTCATG	GGAAGTGTCC	ACTGTCNAAT	300
TGTGTCTACT	CAGATAACAA	GACNTCAGG	AAACCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:536:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 446 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

GAATTCGGCC	TTCATGGCCT	AGGCGCTCGC	TGAGGCAAAA	GGAGGCGCTC	GGCCCGCGGC	60
CTGACAGGGA	CTTAGCCCGC	AGAGATCGAC	CCCGCGCGCG	TGACCCCA	CCCACCCACT	120
CATCCATCTA	TCCACTCCCT	GCGCCGCCTC	CTCCCCACCT	GAGCAGAGCC	GCCGAGGATG	180
ATAAACACCC	AGGACAGTAT	TTTGCCTTTG	AGTAACTGTC	CCCAGCTCCA	GTGCTGCAGG	240
CACATTGTTC	CAGGGCCTCT	GTGGTGCTCC	TGATGCCCT	CACCCACTGT	CGAAGATCCC	300
CGGTGGGCGA	GGGGGCGGCA	GGGATCCTTC	TCTCTCAGCT	CTAATATATA	AGGACGAGAA	360
GCTCACTGTG	ACCCAGGACC	TCCCTGTGAA	TGATGGAAAA	CCTCACATCG	TCCACTTCCA	420
GTATGAGGTC	ACCGAGGGTA	CTCGAG				446

(2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

GGCAAATTAC	ATCACCAAAT	CAGCATATTC	TCCACTGGAA	AGGAGAGGCC	CACATAGCCA	60
AATTATAATC	TGCAGGTTTC	TGAGCCAGTG	TTAAATCTGA	ACAGAGAAAA	GATTTTTTTT	120
TCAATTGGCA	AATTTTAATG	ACATCACTCA	TTGATACCCC	AAAATCTCCA	GTTCTTACCA	180
AGCTTGGCCT	TGCCAGTGG	TTCCTCTGTT	CCCTCAACAA	TGTTTCATGG	NATCTAACAA	240
CTTCCCTACC	CACTAACCTT	CTCAGCTTTC	ATGGTGAACC	AAGCCTCCTC	TGTCGCACTA	300
ACCTTCCAG	CTTTCATGGT	GAACCAAGCC	TCCTCTGTCC	CGCTATTCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 230 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

```

GAATTCGGCC TTCATGGCCT AAGAAGGAGN AGCAAGCGGA TTTCAGAGAG GTGTCTCTTC      60
AGAAAAAAT GGTATTCTTCT TTGAATCAT GCCTGAGCTT TATTTGTTTA TTGTTATGCC      120
ACTGGATTGG GACAGCATCA CCTCTGAATC TTGAAGACCC TAATGTGTGT AGCCACTGGG      180
AAAGCTACTC AGTGACTGTG CAAGAGTCAT ACCCACATCC CTTACTCGAG      230

```

(2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

```

GNGAACCAGA GATCCCCATA GATGGAACAG AATTATCCCA CTACCGTCAG CGTGCCCTCC      60
TGCAATCACA GCCAGTTCGC CGGACGCCTC TCCTCCACAA TTCTCTGCAC ATGCTGTCCT      120
CCCGCTCTTC TGGCATCCAG GTGGGAGAGC AAAGCACAGT GCAAGATTCT GNTACCCCT      180
CACCCCAACC GCCTCCCTCT CAGCCCTCCA CGGAGCGCCC CAGGACTTCC GCTTACATCA      240
GGCTCCGACA GCGGGTCAGT TACCCACAG CTGAGTGCTG CCAGCACCTT GGGATCCTGT      300
GCCTTTGCAG CCGCTGCTCT GGCACTCGAG      330

```

(2) INFORMATION FOR SEQ ID NO:540:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 420 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

```

GAATTCGGCC TTCATGGCCT ACTCCGACTT TCGTCTTGA TTAATGAAAA CATTCTTGGC      60
AAATGCTTTC GCTCTGGTCC GTCTTGCGCC GGTCCAAGAA TTTCACCTAG TTACCCCTCTA      120
GAATTATTGC ATTGGGGCCA GGTGGTGTCT AGTACAGTTT TTTACTTTGG AGAATTTATT      180
GAAATTTTCT TTGGCTGAGA ATGCCTTCAG TGTTGTGGT TATTCCTTGG ATACTTGCAA      240
ATCGATTGTA TTTTCTCTGG GACACGGGGT TTCAGATAGA TCAGTTAAAT GAAGCTTGAT      300
TATATCGTAT TTCACGTCGC ATGCCATGTG TCTGTCTGT TGGACTGTCA GGTCTCAAGA      360
GACGGGCTTG GGTTCCTG TGTGGCTGCT GCCTTGCCCC TTCCCGATC CACTCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:541:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

```

GTGGGCAAAG AAATGAAGTA CATTAAAGGAG GCCTTTTTTT TCCTCCAATG GCTGTTAGAT      60
TGTGTATTGC AACCAGGAGT TGTCAGCTC CTGATCCTAA TCCAAGCTGG GGACTGTGGT      120
ACAGTGTTGC CAGCTGCCTT GCCAGCTGCC TTACCAGGCA GGTCTCGCAT CTGCCATTGT      180

```


CATCCCATG	GAATCAAGTT	GCAAGCCAGT	GAAGTTGCTG	GGGTGTGCCC	AGGTCAGAAC	240
AGTTACAGCT	TAAAAGCCTT	TGCTGCCCTT	TTTCAGATCC	TGTTCTGGG	AGAGTCTCCC	300
ACACTAAGTT	CAGTGTGGGT	ACCAGCTGTG	GTGAGGGTGT	GCTGCCACTG	CAGCTGCTGT	360
CTGGGCATCT	GTGTTAGGGC	CAATACTTCA	AGAAGTGTGA	GTCATTGTGA	AGTGACTGTA	420
GGCAGCTGGG	AAATAACAGC	TGTGAACAGA	GAACAACTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTCGGCC	TTCATGGCCT	ATGGGAGATA	GGGGACTTAA	TTATTTTGTG	GGTTTTTTCT	60
TTTTTAGGTC	TTAGGAAGGT	CTTTGTCCA	TAGGTATCTG	TATAATACAA	TTTTATTAGG	120
TGTAATAGAG	ACAGTTTGT	GGAACAGAA	TGCTGACACT	GATTAATAAT	AAGGTGTATA	180
TATGTTTAGT	CTTTGAGATG	ATCTGTATGC	TACATGTAGG	TGTACATTGT	AATTTTCTGG	240
CTTGTAATTT	TTTGTATCAT	ACTCTGTTTC	GGGAATTTGC	AAATGCCTAT	GACCAGCCTA	300
TGACATCTGA	ACCATACCAA	CTGACCTTAG	AAACAACGAC	ACTCGAG		347

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

GAATTCGGCC	GCCTAGCAAA	AGTGAAAAAA	TAAATAAAAC	AAGCCACAGA	TTGGGACAAA	60
ATATTTGTGA	AGGATATATC	TGATTAAGAA	GTTATATCCA	GAATATATGA	AGAACTTTCA	120
AAACTAAAGA	AAACAATTCA	TTTTTTTAAT	TGGGCAAAAG	ATTAAACAA	ATATTTTACT	180
AAAGAAGATA	TCCAGATAGC	AAATAAACAC	ATGATATTCA	CCGAAATTAT	TAATTAGGAA	240
AATGCAATT	AAGATGAATA	TCATTATATA	CCTACTAGAA	TGGCTATATT	TTAAAAGTTT	300
GACACTGCCA	ATTACTGGTA	AAGATGCAAA	TCAGCGGAAG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

GAATTCGGCC	TTCATGGCCT	ACTTTCTTCC	TACATTAGTG	GCATACTCTG	AATGACCTAG	60
TGAACAGACT	GAGAAGAGGC	CTCTGAATTG	CAGAGTCTCG	TCTGTAGGAG	AAGGTTTCAGG	120
AGAGTATTGA	ATTTTAGGGA	CTAGAATCCA	TCTTACCTAT	GCTGTTGCAA	TCGCATGCTG	180

ACTGGAAGTG TGGGAAAGAG ACTTACAAGT AAGGACATGG GTTTGTTTTG TTTTTTGTTT	240
TTTGTGACAG AGTGAGACCC TGTCTCGNAA AAGGAAAAAA AGTAATAGAA CATTAAATAC	300
AGTATCACAC CATTTATGGT TAAAAAAGNA AAAAGACAAG ACACATATATG AAGTGAGTGT	360
CTTTTAAAGT TAAAAAATT AAATGAAAAC AACTCGAG	399

(2) INFORMATION FOR SEQ ID NO:545:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC GCCTCCATCT CCCTGGCCAT GTTCTTCTTG AAGACCCTGA CAGTGGCTTC	60
TTCTTTGTGG CAGCTGGCCA ACAGCCAGAC CCTGACAGCC AGCCCCAAG CACCTGGGTC	120
CCCAGAGGAT TCTGAGGGTG TCCCCCTCAT CAGCCTGCCC CGCGTGCCAC AGGGAGGGAG	180
TCAGCCTGGG CCCAGCCGGG GATTAAGTCT CATGTCCAGT CAGGGCAGTG TGGACTCAGA	240
CCACCTAGGT TATGATGGTG GCAGCAGTGG CTCAGACAGT GAGGGTCCCA ATGACACCCT	300
TGGTGAGAAG GCCCCCTTCA CATTGCGGAC TCCACCTGGG CCAGCACCTC CACAGACTTC	360
ACTCGAG	367

(2) INFORMATION FOR SEQ ID NO:546:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 455 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

GAATTCGGCC AAAGAGGCCT AACCGCGGNC GCTCTACAAC TAGTGATCC CCCGGGCTGC	60
AGGAAATCGA TATCAAGCTT AATTAAGAAT TCGGCCAAAG AGGCCTAAGC GAGAAGAGTC	120
CCCGTCCGT GCCCTACCAC TACTTTGAGA AGGGCCGGCT AGATGAGTGT CAGATGTACC	180
GTTTGCATGA GCAGGCTCCA AGGAGCGCCC ATCGCTTCAT TACCGAGAAC CCTGTGTCT	240
CCCGTGGGC CAAGAAGCGA CCCATCGTGT TCGCCACCC GTCCTGGAGG GCCAAGTAGT	300
TCCTGTTGCC AGTGACTGCC AGGCCTCAGC CAGGCCTGTG ACCCATTTCCA GGCCAACACG	360
GCTCTAATGT GAGCATTTAT GACTCACCTT CTACCTGACA CCAGGTAGAA CATGAAGTCT	420
CTATTACCCA AACTGGGTA CACTCGGAGG TCGAG	455

(2) INFORMATION FOR SEQ ID NO:547:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 401 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

GAATTCGGCC TTCATGGCCT AGTCATTTTG TCAGCTTTCA CACAAGAATC TTTGATCCTA	60
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```

TTGTAATAGT TAATAAGGAA GTTCTTCTCT TGCTCAAAGA AGTCATCTAC CTCCTTAACT 120
CCAGTAAAAA GGACTTCATC AGCACTTTTC ACCACACTTT TGAAGAAGCC ACCAAACATT 180
TCTTTAGTAT TTTCCGCCT AACACTTAGA TCCTGATCAT ATTCCAGGAA AACATGAAAG 240
TTGCGATCTT TACTGAGAAC AGGGTGAGAA GAAAGCCGCT GAAGAAAGAC TTCATGGGAG 300
GACACAGTCT TCTTAAACAC AGCGAGATAC TCAGTTCCA GTTCTTGTTC CATCTGGGCT 360
TATTATTCCA CTTCTCCCA GTTCTGTCAT CTTCTCTCGA G 401

```

(2) INFORMATION FOR SEQ ID NO:548:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 364 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GAATTCGGCC TTCATGGCCT ACAAGCCCCT CTTACCTCTC TGGATGCTTT CTTTAACT 60
AACTCACCAC TGTGCTTCCC TGCAGACACC CAGAGCTCAG GACTGGGCAA GGCCCAGGGA 120
TTCTACCCCC TTCCCCAGCT GGGAGGAGCT TGCCTGCCTG GCCACAGACA GTGTATCTTC 180
TAATTGGCTA AGTGGGCCTT GCCAGAGTC CAGCTGTGTG GCTTTTATCA TGCATGACAA 240
ACCCCTGGCT TTCCTGCCAG ATGGTAGGAC ATGGACCTTG ACCTGGGAAA GCCATTACTC 300
TTGTGTCTGC TACTGCCCTC CCACAGTCAC CCCAATATTA CAAGCACTGC CCCATTGGCT 360
CGAG 364

```

(2) INFORMATION FOR SEQ ID NO:549:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 195 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```

GAATTCGGCC AAAGAGGCCT ATGCTTTTCT TTGCAGCACT TAGCACAAAT AGTAATTTT 60
ATTTACTTTT TATAGATGTA TTTTATGTCC CTCCACCAGA CTGTATACTC CATGAGGACA 120
AGGATATTGA TGTTTATGTT AACTCTTGTA CACTCAGTGC CTGGCACCAT GCCTGACCCA 180
GAAGAGGGAC TCGAG 195

```

(2) INFORMATION FOR SEQ ID NO:550:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```

GAATTCGGCC AAAGAGGCCT AACATAATGC GCTAGCAGAC TTGGGAATTA GGGGCAGAAT 60
GCTGCTCTAA ATTCAGGAAA TCATGGCAGG GTTTCATATT GAACATGGTC TATTCCTACC 120
ACTAGCGCTT TCCTGGCTGA TTTCTTCTCC AGCTGGAGAC TTCTTCTGG TTTTCCAATT 180

```

TATGCTCCAC	CCTCACCCCA	ACCCACCCAT	AAACCAGTGG	CTGCCGGAAG	CAGTATCTTT	240
CATAGTGGTG	AGTTCTGGAT	TTTCAGCAGT	AATGGCCGAG	AGTCAGGGAC	CAGATGAGTG	300
TGTGTGAGCT	GGTGAGAAAA	GGTAGATTCC	CTCGA			335

(2) INFORMATION FOR SEQ ID NO:551:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 662 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

GCCAAACATG	TCTCACCNAA	NNCCAAATGT	CCCCNGGGGG	AGCAAAATCT	CCCCTGGACA	60
ACTGTGGAAT	CACTGTNNGG	AAGTGTTTAC	TTGAGTGGTT	TNCTGGCCTG	GGCCTCATAC	120
TCTGAATTTT	TGAAGTAAAT	GGTCTGGGGG	TGCTGGGGGT	GGAGAGCAGA	GCACTGGTAT	180
TTTTAGGAGA	TCCCCCTGTC	ATTCTAAAGC	ATATCCAGGG	TTAAGCACCA	TTAATCTGAN	240
GATCTNCNGT	CTGATCTGCG	GGCCCCCTTT	CATCTANGTG	CAGTATTTTT	CTCTATGCTT	300
TTTAAATATA	TGAAAGTTTC	TNGAACTCCA	TCTGGACTTG	AAATATAGCC	TGCCACACAG	360
TTAGCAAATA	TAGCAAGAAT	AACAAGTGTT	CTAAATGGAT	TTTTAATTTA	TTATGGCAAT	420
AGTACATTCC	AANAGGGTGG	CATTTTTTAA	AATGAGATTT	TTCTTTGGG	CCTAAGATTA	480
CAGTCACATG	GTTCCAAATT	CAGAGGGTTC	AAAAGGACAC	AGAAAAGCCT	GCTTCCCACT	540
TGNGCCCACT	GGCCTCCCCT	TTTTTCGCAT	AAATGGCAGT	ATATAGCTTT	GTCTGTTCTT	600
TGTTTNNNGA	GCTTAATACC	TTAGAGACAG	ATTTTNGTAT	ATCTGTACCT	ACAGAACTCG	660
AG						662

(2) INFORMATION FOR SEQ ID NO:552:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GCTGTTTTAA	AAGAGTTGGG	GGAAGAGGTA	GAAATGAATC	TTTTGGTTTA	GTTTTTTAAT	60
TCTCTAAGGA	CAACATTGGG	GAAGTGAGCT	TTAGAGTTAT	ATTTGCAGTA	TTTATTTTTA	120
TCATGAAATA	TTCAAGTCTA	GGCCCTTGGT	GAATTGAGGC	CTGGTGAGTA	TTTCTGCTTT	180
CCCCCTGGAG	AGATTGAGAT	GGTTTCTGAT	TGGGAGCTTT	AATTCTGTGG	GCATTGTGTG	240
GACTTACCAA	AGAGGTATCT	AGAGTTCCTT	TAAAACCCCC	GCCCTGTCCC	TGCCACAAAA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:553:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

```

GTCAAAAGAG GAGCTAGGAC CAGATCTCTA AGTCTTACNG TCCAGGTCAA AAAACAAGTA      60
CTTTCCTATC TGGTTATACA GAAATCTGGA AACAGTCACT CCCAGCCTCA CAATTAAAAA      120
AACTTGACAC TACAGAAAGT TCATAGTTTT CCTTGAAGTC ATGATAGTGC TGAGATTTCA      180
CGGCAACCAA CTGGCCCAAG TACTCCAGAG TCAAAGACAC TGTAAGGAGA GTTGACATNT      240
GAGCATTAGA CAAGACACAG ATGGTANGAG TTAAGCTAGG GTTACTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:554:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```

GAATTCGGCC TTCATGGCCT ACTCTATGGG GATGAGGTAG AGGAGAGCAA GATATTTTCGG      60
CAGCAGGGAA AAGGGTAGAA CAGAATAGGG TGACACAATT TACACTTGAT ACTGCATTAA      120
CATCTGGTAG AGTGTCTAGG GCAAAGGTTA GCCAAAATAT AGCTGGATGG TTGAGGGGATT      180
TAGAAGGAGT TGGGATGAAT CCATAGTCTC AATGAATGGA GAAAAAGTAA CTCAGGAAAG      240
TAAATGCTGG TGAATTATCA GCGGGTGGCT GGTGATGTTT GGTTTGGATT GTGAAAGCTG      300
CTTAGACCAA GATGGGCTGA GGAAGGGGA GGAGAGTGAG CATGTAGAGG TTGAGGCACT      360
TGGTCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:555:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC AAAGAGGCCT AATTGCCAAT CAACAACCTT TCCTAATCCA CCTTGATCCT      60
CAATCATAAT ACTCAAAAAC TGCCAAAAC AAAATCTTCC TGACAAAAT ACAGGCCAAA      120
CTTCCTCATC TGCTTTCCAG GTCTTCTGTA ATCTTATCCC AGCTTATTTA CAGTCTCCA      180
TTTACTAAGA AAACCCAAA TAATCTTTTC CTGCCCCAAA TTCATGTTCT TCCCTTTCTC      240
TTTGTTTATA CTACCATAA TATCTAGAAA TGATACTCAA ATATTCATCC TCAGCACCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:556:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGGGGAAA GCATATCACT AGGACTGTGA CCCCTGTGCC      60
TACCATCTT ACTCTCTACC TCTTAGGAAA GTTTCACGT GTTACTTGG GACTTCTGGA      120

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CTAGCTGCCG TTTGCAACAG TGGACTTACC AGTTTGCCAC TACTCTGCTA CCTTTCTACT 180
GGTGACACA CCTTAGTAAG GCAGTTTGAT TACTAAATGC AGCTGTCTCC AGAAATGGAA 240
TGATGCTATA GGCCACTTAC TAAATGAATG ATCAGGAGTC TCGAG 285

(2) INFORMATION FOR SEQ ID NO:557:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 409 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

GAATTCGGCC TTCATGGCCT AGCTGGATCT GCCCACTGTG CACTCCATCA TCAGCAAAAT 60
GATCATTAAT GAGGAGCTGA TGGCCTCCCT GGACCAGCCA ACACAGACAG TGGTGATGCA 120
CCGCACTGAG CCCACTGCCC AGCAGAACCT GGCTCTGCAG CTGGCCGAGA AGCTGGGCAG 180
CCTGGTGGAG AACAAACGAAC GGGTGTGTTGA CCACAAGCAG GGCACCTACG GGGGCTACTT 240
CCGAGACCAG AAGGACGGCT ACCGCAAAAA CGAGGGCTAC ATGCGCCGCG GTGGCTACCG 300
CCAGCAGCAG TCTCAGACGG CCTACTGAGC TCTCCACTCT GTTTCCCGCC TGGGCCATCC 360
AACCTTGAAG TCCTAAACCA CACCTCAGTC ACTAAAGTC TGTCTCGAG 409

(2) INFORMATION FOR SEQ ID NO:558:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 287 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

GAATTCGGCC TTCATGGCCT AGGAAAAAGA GATATAAAAA AAAGAAAAAG AGGNGGTACC 60
AGCCAACAGG AAGACCACGG GGAAGACCAG AAGGAAGGAG AAATCCTATA TACTACTATA 120
TAGATAAGAA GAAACAATTT AGAAGCAGAG GATCTGGCTT CCCATTTTGA GAATCAGAGA 180
ATGAAAAAAA CGCACCTTGG AGAAAAATTT TAACGTTTGA GCAAGCTGTT GCAAGAGGAT 240
TTTTTAACTA TATTGAAAAA CTGAAGTATG AACACCACCG TCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:559:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 380 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

GAATTCGGCC TTCATGGCCT ACTTCTCAAA AATAGATGTA CTTGACTACT CTTTTCTTGA 60
TTCTTCTGGG AGTAACCATC TCTTTGGAGA TGGTTGTTAG TAAGGTTATA AAAATAACCT 120
TACTGAGGAA CTCCCATGCA ATCCTCTGAA AATAATAAAA ATTCCTTAT TTCAAGAACT 180
CTTATTTAAC AAAGTAATTG TTAGGGTTGA ATACTCTAGG GGCAAATGAT TTATTGTGCC 240
TTTTGTAAAA GTCAACACTT GGCAGGTGTG TGTTTGACAC TGGCTGATGC TGGGCTTATT 300

TCTCTAAGAG TATGGTAATT CTAGTAAAGT AAAGAAAATT GTTTATCAGA TATTAGGAAC 360
 TGTACATAGG CCCCCTCGAG 380

(2) INFORMATION FOR SEQ ID NO:560:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GAATTCGGCC TTCATGGCCT AAAATTGTTT ACGAGGGATT ACGTGGTTTA CTTGTCTGTT 60
 GTCCAGATAG CTTTATATTC TTAAAGATTC AGCTCGGATT CTTATCCTAT TTTTGCCATT 120
 AACTTTCATT ATGATTTTGG CAAAGCCATT TGTGTTGCTT ACATTTTTC ATTTTAATGT 180
 GGTGTCTGGC CTCCCCCA CACTCGAG 208

(2) INFORMATION FOR SEQ ID NO:561:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 505 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GAATTCGGCC TTCATGGCCT ACAAACANTT TTTACTGNGT TATAAATAAA AACAGCGACA 60
 CATCCTAAAT GTGCACCTGT GCCGTGGCTG AGCCGCTGCA GTGAGGGCTA GTGTGCAACA 120
 CCGATGCTGT GCTGGACGCG TGCCAGCCG GGTCCCCTGA CAGGAGGCAN CCGGGGCCGG 180
 TCGTGTGTTT TGCATGTTGC AGTCATGGGG CGGGGNCGGC AGANGCCTGT GTGATNGTNG 240
 CGTCCCTGGA AAAAGAAGNN GGGNAGGCCC CTCNCACNTG TANCCAGCC TGCAGANGGG 300
 GNGTTINTGT GGTCTTCCC CGTGCATATG CGTGTGATNT CACCCATCCC GTGTGGGTGC 360
 GCAGGAGGGG CCGAGGGAGG AGGGTGCTGG AGGGCGGAAG TTACCTCTGA CTGGAGGAGA 420
 NACCCGGCCC GTGTNACCAG CANAGGTGTG NTCGTTCTAA AACTGGGAAA AATTTGTTCT 480
 TAATTTTAAC CACAGTCCCC TCGAG 505

(2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GAATTCGGCC TTCATTTAAA AGATAAGTTA GAAAAGTCAA AGCGAGAACG GCATAACGAG 60
 ATGGAGGAGG CAGTAGGTAC AATAAAGAT AAATACGAAC GAGAAAGAGC GATGCTGTTT 120
 GATGAAAACA AGAAGCTAAC TGCTGAAAAT GAAAAGCTCT GTTCCTTTGT GGATAAACTC 180
 ACAGCTCAA ATAGACAGCT GGAGGATGAG CTGCAGGATC TGGCAGCCAA GAAGGAGTCA 240
 GTGGCCCACT GGAAGCTCA GATTGCGGAA ATCATTCACT GGTTCAGTGA CGAGAAAGAT 300

GCCCCGGGTT ACCTTCAAGC TCTTGCTTCC NAGATGACCG AAGAGCTCGA G

351

(2) INFORMATION FOR SEQ ID NO:563:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

GAATTCGGCC TTCATGGCCT ACAAACACTGT CCATGGCATG AAAGACTTGG ACCGCCATCT	60
CAGAATCCAC ACGGGAGACA AACCGCACAA GTGTGAGTTC TGTGACAAGT GCTTCAGCCG	120
GAAGGACAAC CTGACCATGC ACATGCGGTG CCACACCAGT GTGAAGCCAC ACAAGTGTC	180
CCTGTGTGAC TACGCTGCCG TGGACAGCAG TAGCCTCAAG AAGCACCTGC GGATCCACTC	240
TGATGAGCGG CCGTACAAAT GCCAGCTCTG CCCCTATGCC AGCCGCAACT CCAGCCAGCT	300
CACCGTCCAC CTGCGATCTC ACACGGGTGA GTCCCTGACC AGGGGTCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:564:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 416 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

GAATTCGGCC TTCATGGCCT ATAGAATTCC TAGACTTTAC AGACTAATAG TTTGACATCT	60
ATCTCTGGCA AAATTCGAAA CTAAACATT AAACAAGGGA AAATGAGGGG TGGAGGNAAA	120
GACTGCGGAT TTCTAGGAAC TAACAATTTG CTAAGNATCA TTCATTTTAA AACTAATGTT	180
ATTTACTTTT GTGGTAGATC AGGGNATATG CAAGATCTTT ACTTTTCAGC AAGACATTTT	240
TCTCATAATG TCCTTATGGA GAAGACTGCT CTATGGACTA GNATAGTTTG ATAAGAAAGG	300
GCTGAGTCCA GCGNATTCAT TAGTTCAAGC AAAATCTACT GGAGGCCAAC TAGATTTC	360
GCCATTATCG TACTTGGCAC TTTCNATACT TTGAATTTTA ACCACCACAC CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:565:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 465 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

GAATTCGCCC TTCATGGCCT AAGACGGGGT TTCACCATGT TAGCCAGGAT GGTCTCGATC	60
TCCTGACCTC GTGATCCTCC CGCCTCAGCC TTCCGAAGTG CTGGGATTAC AGGCGTGAAC	120
CACCACGCCC AGCCATATAT CAGGAACCTG AGCATCCATG GAGTTTGGTG TCCAAGGGAG	180
GTCCTGGAAC CAATCCGCCA TGGATACTGA GGGATGACTA TAATATGAAC CTGTATGTA	240
TGTAATTTAC CATTTTCTAG TTAGCCACAT TAAAAAAGGA AAAAGAAACA GGTGAAAAAT	300
ATTTAAAAAA TACGTTAACA CAATATATCC AGAACATGAT TTCACATTGA AATCAATATA	360

AAAATTACTG AAATAGTTTA CAGTCTGGTG TGCATTTTAG ACTTAAAGCA TATCCCTTTG 420
GGCATGGTGG CCCATGCCTG TAGTCCTAGC CACTGAAGGC TCGAG 465

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GAATTCGGCC TTCATGGCCT ACAGCGAGAA GGAGTGTATG AGTGTGAGTG TGTGTGCATG 60
GAAGTTGGGC ACTGGGCGTC TGANTCCTTC CCCACCCAAG AGAGGAAGGA CCCCTCACCA 120
CCCCACTGG CGAGACAGTT TACTTTGCCG ACTTGCCATG TTTTGGCCAA AACCAAGATT 180
TTGAAGGAAA TGAGTGGCCA GCGCCAGGGC CCAGGCCATG TGGCCTGCCC AGCCTCAATG 240
TNACTTGGTG GCGGGGTGGG GTGGGGGTGG GCAGCAGCAT CCCAGCCTTG AGATGCTTCA 300
CTTTCCTTCT CTGTAACCAG ACTTTGAAAA ATTGTTTCGTT TCATCAGGCA TCTCGAG 357

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GAATTCGGCC TTCATGGCCT ATCTGCACTG AATTAGAACA AAATTTAGGA GACTTCTAAT 60
TTGAAGCCAG AGGTGCTGAC TTTTGAGTCT TTGGAGATTG CCTGTTGGAA ATATTCCTGT 120
TGAGGGCCAA TGTCCCAATG GGCTCTGAAG ATGAGAAGGA TCCCTGCCCT ATGTGGATGC 180
CACTGGATCT GGAATCATTT CTGTGGCTCA GATTTCTGTA CACATTCTGC CAGGACAGGA 240
GCAGCCGTAT TGGGAAAAGA AGGGGGACAA TAACTAGAAA CGAACTAAGA TGTGGCCCTT 300
GCTTTTGTAC TTTTAATTTA ATGGGAAACA CTCGAG 336

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GAATTCGGCC TTCATGGNCT ACCTGGACCT TGGGTGGCAG GCCTGGGGCC TTCAGTCCTT 60
AATTCAGGAG GTAGCCAGTC GCTGGAAC TAAGANTGAAGT TCAGCTGTTG TTGCCATAGC 120
TGGAGGGAAG AGGGAAAGGA GCGCTGCAGG GGAGCAGAGA CCTCACCTT CCTCTGCCGA 180
CATCAGGCTG CCGGTGCTGG ACGGGGCCCT GGCAACCGTG GCAGGAGTGG TGATGTCCGA 240
TGATGGTAAC AAGGGCTTCC TGAGGACCCC GAGCTGTCTT AAGGGCTCTT TACCTGGAGT 300
AAGTATCCCC TTTAATCCTC CCAACAACAC TGTGAAATTG ATTCTGTTGT TATTCCTT 360

TCACCGATGA GGAACCCACA GCCCAGAGAT GTTAAGTAAC CTGCCCAAGC CTCCCTCTGA	420
GCATGGCAGA GGGAGGGTCC GAATGCGGAA AGTCTGGCTT CAGTGCCCCC ATCCTCTCGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

GAATTCGGCC TTCATGGCCT ACTCATCATT TGGAAAATAC TTGATGGCAG GAGAACTTGC	60
TTAAACTAA AGGTGGAGAA AGAGTTAACT TCCAGGACAA CCCATTATAG CTCACCTTCTT	120
ACCAACAAAG CAGTTTTTAT ACAGCACCTT AGGACTCATT TCTAATGTCA ACCCAGATGG	180
CCAGTAAAGG CAAGGGAAGA GGCTAAGTGA CTCACAAAAA TCTCTGATAT TGAGGTCTAA	240
TGTGAAGGCT ATAGATAGGA ATTCGCCACA AACTTCTAAT GAGGACTAAT ATGAACAGCA	300
AATTGGAGAA GACACCAAGG ACCTAATTTT AGTTTCACTA GCCGTGGGAC CTTAGAAAAA	360
AGACCATTG CTCTGGACTT TTGTTTCCCA AGCCATAAAA TGTGGAAGAA TCTTCACAA	420
TTCAAGTTGG TCATGTATAT TTCCCTTTTA CAGAGAAAGC TGAAGCCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TTCATGGCCT AGAAAGGATC AAGCTGATCA GAAGCGGGAG CTGCATTGAG	60
GGAAAAATAT GGCCAGAGAA GGCCTCACTG AGGAGGTGAC GTTGGTGATG CTGGAGCTCA	120
GATCTGAAGG GGAAGAAGGA AGCAGCCACA TATAGAAGTG AGGGAGGGGG CTTAGGCAAA	180
AGGAACAGCA AGCGGAGAGG CCCTGAGAAA GGAAAGGCTT GGCTCGCTCA CCTGCAAGGG	240
CCCCCTGGCT TGACATAGTG AGAAAGGTGT GAAGATGAAT TTGGAGAAAG GCAGGGACAG	300
ACCACAGGAG ACCTTAGATT TGATTCTGAG GGCGATGGGA TCCCTTGAGA GGATGCTGAG	360
CAGGGGAGAG ATGTGATCTC CTTTTCATTC TAACATGATC GCTGCAGCTG CTGCTGGAGA	420
ATGGTTGCAG GAGCGAGAGT AGAGACTGGG AAGGTCTGTG CATCCTCTAA GCNACAGGCG	480
TCTCGAG	487

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

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GAATTCGGCC TTCATGGCCT AGAATAAATT GTGATACAAA AAAAAAAAAA AAAAAAGAGT      60
GTACACTATG AATGGGTTGG TCGTTTTCTT CCTGGCTTTT TTTCTTTTTA TTCAGAGTTA      120
GGAAATACTT TTATTTTTTA AAGGAAAATT CATCATAAAT TTGCGCTGGT ACTTTTGTAC      180
ACAGGATTCT TTCAGTGAAG CTTTGCCGGC CGGAAATCTC CATGGCCGGC CTTGCCTCTG      240
CCCGGTCCTC ACTGAAGCCT GCTGGGCTCT CTCCACCTAC TTGGTCCATC AGTCTGTGCT      300
TGGCTCATCC TAGCAACCTG GATCCCGCAC CCGATATGGC ACCGTGCTTG GCTGGAGGCT      360
GGTCCGAGCG TCCGTGACTA GCTTCCACCT TCGGCGCCAG CTTTGGACA AGGGGAACGC      420
AGTGGCACCC AAAAAGCTCG AGACATGAGA CTCGAG      456

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(2) INFORMATION FOR SEQ ID NO:572:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

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GAATTCTAGA CCTGCCTCGA GATGCCCCGAC TACTACAAAC CTCAGTACCT GCTGGACTTT      60
GAAGACCGCC TTCCCAGCTC GGTCCACGGC TCAGACAGTC TGTCCCTCAA CTCTTTCAAC      120
TCCGTCACCT CCACCAACCT GGAGTGGGAT GACAGTGCGA TTGCCCATC TAGTGAGGAT      180
GGAGACCTCA CAGACACGGT CAGTGGTCCC CGTCCACAG CCTCCGACCT GACCAGCAGC      240
AAGGCCTCCA CCAGGAGCCC CACCCAGCGC CAGAACCCCT TCAACGAGGA GCCGGCAGAG      300
ACTGTGTCTT CCTCTGACAC CACCCCGTGT CACACCACCT CTCAGGAGAA GGAGGAGGCC      360
CAGGCCCTGG ACCCGCCGGA TGCCTGCACG GAGCTCGAG      399

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(2) INFORMATION FOR SEQ ID NO:573:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

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GAATTCGGCC TTCATGGCCT AGATTGGGT TAGTGGTTTT CTTTTCAGCAT GTTGAAAATG      60
TCACCCAACCT GTTTCTGGG TTCCTTTGAA AAGCCAGCTG TCTGTCTGTC TGGTTGTCAT      120
GTCTGAAGGT GATGTGTCTT TACCTCTGGC TGCTTTAAGT ATCTTTTGCC TTTTCCCCT      180
TTGTGAATGT TTTTGCTGAA GTGTAACATA TACACAAAAG AGTGTGCAA TCATCAATGC      240
TTGATGGATT CTCGAG      256

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(2) INFORMATION FOR SEQ ID NO:574:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 199 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCT TCATGGCCTA GAATCATGCA TTTTCTTTTC TTTTTTTTTT TCCCGTTGGC	60
TTTGTCTATG CTGGTGGCAT CCAGGGCATT GCTTTGTCTC CCTGATTATG CCCAGGATTC	120
AAGGTCTTCT TATTTGTGGG GAGGCAGGCT GCCCACTGGG ACGGTTTTTA GTGTGTTTNC	180
CATTCCTGGC TCCCTCGAG	199

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

GAATTCGGCC TTCATGJCCT AGGATTTGAA GAAGTTGGGA AAGCATTATG TAGATTAATA	60
TACTGGTTGG TTCCCTATCT ATGTGGAAGG TCATATTAGC TGCAATTATT TAATTTGCTG	120
TGTTATTTTG TGTTATATAA CACAAATATA TTTGTATATT AACTTCATTT TTAGTTCAT	180
TTTTCCTGTT GTATACAAAA TGAACAAATC TTGTAATTAT TTTCAAATAT AGAAGTATAT	240
ACATTAGATG GATTTCCAAG ATTTTGTAAAG NAAATCTTAA ATCAGTGTTT TGAGTTATTT	300
AATTTTAAAA TTAATCTACA AATTATGCAC NACAACTAG CAACTCGAG	349

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

GAATTCGGCC TTCATGGCCT ACAAATTTTG CTCACCTTCA TTAATCAGTT GCTCAGATAG	60
AAGGAAATGA CATCTGGTTC TGTCTTCTTC TACATCTTAA TTTTGGAAA ATATTTTCT	120
CATGGGGTGG ACAGGATGTC AAGTGCTCCC TTGGCTATTT CCCCTGTGGG AACATCACAA	180
AGTGCTTGCC TCAGCTCCTG CACTGTAAAG GTGTGGACGA CTGCGGGAAT CAGGCCGATG	240
AGGACAACCTG TGGAGACAAC AATGGATGGT CTCTGCAATT TGACAAATAT TTGCCCAGTT	300
ACTACAAAAT GACTTCCCAA TATCCTTTTG AGGCAGAAAC ACCTGAATGT TTGGTCGGTT	360
CTGTGCCAGT GCAATGTCTT TGCCAAGGTC TGGAGCTTGA CTGTGATGAA ACCAATTTAC	420
GAGCTGTTCC ATCGGTTTCT TCAAATGTGA CTGCAATGTC ACTTCAGTGG AACTTAATAA	480
GAAAGCCCT CGAG	494

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

GAATTCGGCC TTCATGGCCT AGGCACGTTA AATTTTAAAA GTTANAAAAA GAAAGATGCT	60
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TTTTGCAGCA GTTCCAGGGT AAACGGCCCC ATGCAACACA AACCCCTCGGG AAGGGCATT	120
CAGCCTTGCA GTGGGCCACG GAGTGCACCA CGCGGCGCTC AGCCCCCAG GGAAGCGATG	180
CCCCACATCG GGCCAGAAAC AAAAGGGGGT GAGATAAAGC ATGCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:578:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

GAATTCGGCC TTCATGGCCT AAGGAGTTTG AGATATATTT AGGAAGCAGA GCCTATAAGA	60
CATGCTGATC ACTTGCATAC ATAACTGAG AGAACTAGAG GTATAGAAGA CTTCTAGAAC	120
TTGGAGAAAT TGGATGAATG GATGTATTGT TATTGATGTA ATGAACCTTA GAGGTGGGTG	180
GGATCAGAAA GATCTATTTG CTTTCAAAGG AAATGGGGAG TGGACAGGTA TGTTGGCAGC	240
ATAAGAACTG GAATAACAGC ACATCTCATT CATGCCTTAA AAGAACGTGA AACTTTGAAT	300
GTACAGCAAT GGTATTCAAT AGGTATGACT TTGCCCTTAA AGGACATAGA CACCAGGGAT	360
GTTGCTAAAT ATCCTCCAAT GCACAACACA ACCCCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:579:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

GAATTCGGCC TTCATGGCCT ACGAGGACGA GGACGTCAAG GATAACTGGG ATGACGATGA	60
TGATGAAAAA AAAGAGGAAG CAGAAGTAAA ACCAGAGGTA AAAATTTCAG AAAAGAAAAA	120
AATAGCAGAG AAGATAAAG AGAAAGAACG GCAACAGAAG AAAAGGCAAG AAGAAATTAA	180
AAAGAGGTTA GAAGAACCCG AAGAACCCTAA AGTGCTAACA CCAGAAGAAC AATTAGCAGA	240
TAAACTGCGG CTAAAGAAAT TACAGGAAGA GTCAGACCTC GAATTAGCAA AGGAACTTT	300
TGGTGTTAAT CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:580:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC TTCATGGCCT AAGCGAGGCC TGAGCCTCTG CGTCTAGGAT CAAAATGGTT	60
TCAATCCCAG AATACTATGA AGGCAAGAAC GTCCTCCTCA CAGGAGCTAC CGGTTTTCTA	120
GGGAAGGTGC TTCTGAAAA GTTGCTGAGG TCTTGTCCTA AGGTGAATTC AGTATATGTT	180
TTGGTGAGGC AGAAAGCTGG ACAGACACCA CAAGAGCGAG TGAAGAAGT CCTTAGTGCC	240

AAGCTTTTGG ACAGATTGAG AGATGAAAAT CCAGATTTTA GAGAGNAAAT TATAGCAATC 300
AACAGCGAAC TCACCCAGAC TCGAG 325

(2) INFORMATION FOR SEQ ID NO:581:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGNCC TTCATGNCCT ANGAGAAGNA CCCAGACCCC CCCAAGAAGG AGGAGGANCN 60
CCNNNGAGNC NCTNCTCCAG NCGGANGAGG AGCGCAAGGC CAAGTNCGCC AAGATNGAGG 120
CGGAGCNCGA GGCCNTGNCC CAGGGCATCC GAGACAAGTA CGGCATCAAG AAGAAGGAGG 180
AGCGCGAGGC CGAGACCCAG ACGCCGCCAA GAAGGAGGAG GAGCGGCAGG AGGCGCTGCG 240
CCAGGCGGAG GAGGAGCGCA AGGCAAGTA CGCCAAGATG GAGGCGGAGC GCGAGGCCGT 300
GCCCCAGGGC ATCCGAGACA AGTACGGCAT CAAGAAGAAG AAGAACGCTC GAG 353

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

GARWWYKCSS YYTTNANGGC TAGTCAGTGG CAGGGCCACC CAGAAGCCCC GCAGATGACG 60
GAGCTGAGAA CAGGGAATTN ACCTNCACGT GTTGCCATTT CCTCANTGGA AAGTCCTTGG 120
GAGGTGGCTG GGCTCAGCCT GAGCTCAGGG CTTTTCGGTG GGGTTGGGGC AGGGGCAGGG 180
CGGGCNNTTG CAGGTGGCAC AGGCTTCATC AAGGCAGGAC ACGGGNTTCA TCAAGGCAGG 240
AGCCACAGCG CCCGAGCCCT GGCAAGGGGAG GTAAGGCCCA GGATGGGGCA GGGCCGTGTG 300
TCCTTGGNAC GGACATCCTT NTCTGCCAGA GACCTGCTCC CCAAGCCCTG TCCCTCCCAA 360
TCCCCAGGCA GCCCACTCTG CCCTCCATAG ATGAATCTAA TATTGAATTT CTAGACCTGC 420
CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:583:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

GAATTCGGCC TTCATGGCCT AAGAAAAGAA AGTAAGATTA TCTCCAGCCA AAATGTCAAC 60
CAAGAATTCT ACAGATCTAG TTGAATATGT TGACAAGAGT CATGCTTTTC TCCCCATCAT 120
TCCAAACACC CAGAGAGGTC AGCTAGAAGA CAGACTGAAC AACCAGGCAC GTACCATAGC 180
TTTCTTCTT GAACAAGCCT TCCGCATCAA GGAGGACATC TCTGCTTGCC TGCAGGGGAC 240

CCATGGCTTT CGAAAAGAGG AATCGCTCGC CAGGAAGTTA CTGGAAGGCC ACATCCAGAC	300
CATCACCAGC ATCGTCAAAA AACTCAGCCA AAATATTGAG ATTTTAGAAG ACCAAATAAG	360
AGCTCGAG	368

(2) INFORMATION FOR SEQ ID NO:584:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 437 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

GGAATTCGGC CAAAGAGGCC TAAACGACTC TTTGCCCTGT TTCTTCTTGG CTTCCTTGC	60
GTAACAAGGA TGAAGGAGGT GGTTTAACTT TATTTTGTG CTTTAACTTT TTAAAGTCTA	120
AAGTAAGTGC TTGAATCGGG TGGGTTTCA TTTTTTGTG TTCTCACCCC TCAGGTTGGC	180
CCCTAAGTTC GCCTCTCACC CTCGTGTCAG CTGTTAGACA CTGACTCAGT GGCTCAGAAT	240
ATGAAAGGCT CAGGAAGTAG CATGCTGGCC CCACCTCCCT GTCCCCATAC CTTAGCAGAG	300
CAGCTGCCCC GCAGGGCCTC CTTCTCTTTC CTAAGAGTTT ACTCCATCCA TGGTGGGTGT	360
CTTGCTAGGC CCGAGATACG AGAGGGAGTG CTGCTGTTAC AAGAATTTAC AGTTGTTCTC	420
TTCGGCACAA GCTCGAG	437

(2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC AAAGAGGCCT AGTGCAGAGT TGCAAGCAAG TTTATCAGAG ATACGCCATG	60
AAGTTCGTCC CCTGCCTCCT GCTGGTGACC TTGTCTGCC TGGGGACTTT GGGTCAGGCC	120
CCGAGGCAAA AGCAAGGAAG CACTGGGGAG GAATTCCATT TCCAGACTGG AGGGAGAGAT	180
TCCTGCNCTA TCGTCCCGAG CAGCTTGGGG CAAGGTGCTG GAGAAGTCTG GCTTCGCGTC	240
GACTGCCGCA ACACAGACCA GACCTACTGG TGTGAGTACA GGGGGCAGCC CAGCAATGTG	300
CCAGGCTTTT GCTGCTGACC CCAAACCTTA CTGGAATCAA GCCCTGCAGG AGCTGAGGCG	360
CNTTCACCAT GCGTGCCAGG GGGCCCCGGT GCTTAGGCCA TCCGTGTGCA GGGAGGCTGG	420
ACCCGAGGCC CATATGCAGC AGGTGACTTC CAGCCTCAAG GGCAGCCCAG AGCCCAACCA	480
GCAGCCTGAG GCTGGGACGC CATCTCTGAG GCCCAAGGCC ACAGTGAAAC TCACAGAAGC	540
AACACAGCTG GGAAGGAATC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

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GAATTCGGCC AAAGGGCCTA CAGAATAGCG GTACCATGAT AGAATACTGC AATTGTGGTC      60
AGAATTACAG TATGCACAAA GAATTAATTA GCATTATTAA AGAGTCCTCA CTAAACATTT      120
CATATGATCA CACTGAAGAA CTGTAACATT CCATAGAGTG AAGTGGTTCA AATTTCTCTT      180
GGAATTTTTC CTTTTGTTGG CCTTATTTTA TGATCCTTTT CATATTTCTT TTGACTTAGA      240
GTATTAATAC ATGGCCAAAA TAATTTAGTT ACTACCTCAT ACAAACAATA TAATGGTTAC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

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GAATTCGGCC AAAGAGGCCT AGTTGTTTTT AATGGCACAG GACTCTTCCA CTTTGTGGTC      60
CTCCTCTAGC ACAATACTGG ATGGCTGGGG CAAAAGATTA AAGGAAGTCT TTTCCACATC      120
ATTTTCTGTC TGTTCTCTCA ATCTTTTAC TAAATTTGAT ACAAATTCCT CTATTTCTTG      180
ATGATATTGC TTTGAAATAG CATTGTTTAT GAATAGAATC TGTAATATAG GTCCATCTAA      240
CTTAGTATCG TTCACCAATA TTCCACTCGG TCGAGTCAGA ATGTTCAATT TTCGTTTAAG      300
TTCTTGATTC TCGGCGCGGA GCTGCTCGAT GGTCTCCACG CACTCGAG      348

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(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```

GAATTCGGCC AAAGAGGCCT ACTCATGACA GGATGACAGT CACATTTGGT AGACACCATC      60
AACCAATGAT CTCTAATTTG CGGCCCCCAA CAAGCAATGG GGTTCTGTGG GCTACATCTG      120
GAATTTGAAA TGTCTCATGG AAATCATGTT CTTACCCTGG AGAAGGGTGG CTGCTTAGGT      180
GCTACTTAGG AAACCACTCT GGCAGACCAG ATCTTCCCA ACTCAGGGGC TATGCGGGGA      240
GAAGTATTAG GAGCCCTGA GCAGGAAGGA TGTACTTAGG AAGGCTACCG GGGATGGGGA      300
AGGGTAAAAG AGCTTAGAAG CCTGGGTGAA GTTTGGGTAG ACCAAAAACA GGAGGGAGGG      360
AGGGAGGATG TTCCCTTGA ATACAACTA GAGAAAAGCT TAGGGGANCA AGTCTTTTTA      420
TTGGGGGACA GTGAAGAGTT TCCTAAAAAT TCCCTGGCCC CCAGGCCTTG GCTAAAAACC      480
CTCGAG                                     486

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(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

GAATTCGGCC	AAAGAGGCCT	AATTGATTGT	GATTAACCAA	GATGTATGGA	AAACAGTTTT	60
AAGTGTGTAG	TGCATGTATC	TCATAAGGTC	CATTAAGACG	TTCATTATTT	TTCAATTGAT	120
GCGTCTTAAG	CCCCACTTGA	TGTTTGTGT	AGTGCATTTC	CACAGAAGGA	TTCTGCACTG	180
TGGGATTGAG	TTCATTTTGT	TAATTGCATA	ATACAACCCC	ATCGTGTTC	ATAGAAAATA	240
GTAAATACTC	TTGCTTTTAT	TCATTGGTAT	TCTTTGATAT	TACTGAAGAA	ATACCAAAGA	300
AGCAAAGGAG	CAAAGAAATA	CCAAAGAAGC	AAAGGAGCAA	GTGAATAGTT	CTTCAAACCT	360
TTACATATTA	AGGGCACGAA	TGTTTCTTGA	AATGTGGACA	CATACTCGAG		410

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

GAATTCGGCC	AAAGAGGCCT	ACGGCCAAAG	AGGCCTAATT	GAATTCTAGA	CCTGCCTCGA	60
G						61

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

GAATTCGGCC	TTCATGGCCT	ATCTAGACCC	AAATATTTTG	AATATGTTAT	CTTGTCTCTT	60
TTCTTTTGT	TATATAGAGA	GATTGATGCA	TAAAATCTGT	GTTGTATGA	CTGTAATTCC	120
AAGTTTAGCG	AAATTGTCCC	TAGGACAACA	CACCAACGGC	CATGAGCTGT	CTCGGTCTCG	180
CAAGCTTAGT	CTCCGATCCT	GCCCACTCGA	G			211

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

GAATTCGGCC	TTCATGCCTA	GCCGGACCTG	GTGCTCCTTT	CCTTGGTGCT	GGGCTTCGTG	60
GAGCATTTTC	TGGCTGTCAA	CCGCGTCATC	CCTACCAACG	TTCCCGAGCT	CACCTTCCAG	120
CCCAGCCCCG	CCCCGAGCCC	GCCTGGCGGC	CTCACCTACT	TTCCCGTGGC	CGACCTGTCT	180
ATCATCGCCG	CCCTCTATGC	CCGCTTCACC	GCCCAGATCC	GAGGCGCCGT	CGACCTGTCC	240
CTCTATCCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:593:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

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GAATTCGGCC TTCATGGCCT AAAGAAATGA AATAATATCT CTGAATTTTA GTCCATGTTT      60
TCAATGATTT CTGACTTTAT TATATTAAC TTTATTAATG ATCACAATT ATTTTGTA      120
TTTTGCAGCC AAAGGGACAA TTTATTTTGT AAATTGTTGA TTCTATTGTC AAAATAGGGA      180
TCGACTCGAG                                     190

```

(2) INFORMATION FOR SEQ ID NO:594:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 208 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

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GAATTCGGCN TTCATGGCCT ACGGGGAACA GAGGATGGCG GAGGAGGGAA CACACAAGCA      60
GGAGCCCATG CAGCTGGGAG CCACTGAGAT CCCAGCTGGA GGAAGAGTGC CCTGGCACTG      120
AGGTCTAATG GCTGTCCAGC TGCTGCCCCA GGATGTGAGG GCAGGTGGTA GGCCATGAAG      180
GCCGATTGAA TTCTAGACCT GCCTCGAG                                     208

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(2) INFORMATION FOR SEQ ID NO:595:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GAGCTATAAA ACAGAAATAC ATGCATAGCT GCAGAAACCA TGATAGGTAG AGGACTTTTC      60
TTTTGGTTTT GTTTTGTTTT GTTTTGTTTT GTTTTTGTTT TTACAGAGAA GAGACTCGAG      120

```

(2) INFORMATION FOR SEQ ID NO:596:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

GAATTCGGCC	TTCATGGCCT	AAGAAACCAA	ATTAGCAGAC	GGATAGAATA	TAAAGCANGA	60
GGCAATACTT	ATAGTGTATT	AAGAACTTG	CTAGACCCCA	TCCAAATTAC	TCAGTCTACT	120
GTTGGTTGAT	AGAATTACTT	TAGGAAGAGT	ACGTTTTTCC	TTGGAAATAC	ACTGGAAGTG	180
GTACCAAACA	AATCTAATAA	AATGATGTTA	AAGAGATTTG	CAGTAATTTT	TATCNACTTT	240
CAGTTTGCAA	ACTTTTATAA	AGATATGAAA	NGGACACTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:597:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 184 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GGCCTTCATG	GCCTAGACAC	ATACAAAGAT	AAGGCTTTGA	TAAAATTCAA	GAGTTATTTG	60
TATTTTGAGG	AAAAAGACTT	TGTGGATAAA	GCAGAGAAGA	GCCTGAAGCA	GACTCCCCAT	120
AGTGAGATAA	TATTTTATAA	AAATGGTGTC	AATCAAGGTG	TGGCTTACAA	AGACATTTCT	180
CGAG						184

(2) INFORMATION FOR SEQ ID NO:598:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAATTCGGCC	TTCATGGCCT	ACTTTGAGTT	AAATAGAGAG	TTGATTAAAT	GCATATATTG	60
ACAGTTACTG	ACTCAGTAAG	CTTCATAATT	CTAGGAATCA	ATCACTGCTG	ATTTCATATGT	120
TTAGATATAT	TCATTTCTGT	CTTTCTGTTT	CTTAGGCCAA	AAAGAAAAAA	GAAAACCAAT	180
ATTTAAGAGA	AGAGAAAAAT	GAAGACGGGA	CATTTTGAAA	TAGTCACCAT	GCTGCTGGCA	240
ACCATGATTC	TAGTGGACAT	TTTCCAGGTG	AAGGCTGAAG	TGTTAGACAT	GGCAGATAAT	300
GCATTTGATG	ATGAATACCT	GAAATGTACG	GACAGGATGG	AAATTAAATA	CGTTCCCCCA	360
ATCCCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:599:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 376 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

GAATTCGGCC	TTCATGGCCT	AAGACTCTTA	GATCTAAAAG	GAAACTGACT	TGCCACCTTG	60
CCAGAGGAAT	TCTTGAAATG	TTTCTGCAGC	CACCTGGCCT	TGAAAATAAA	GGGTGCAACT	120
CTCAAATCTT	GTTCTAACCC	GGCTGGAGGA	ACCACAAGAC	CCAATGAAAT	AGCATTTTCT	180
CTCCTTTTCC	CAGCACTAGT	ATATAACCTA	TGAGGAACCC	TTGTCTCTGA	ATCTGCTCAG	240

CTTGAAATTT TGTCTCTGAA GGAAGAGAAT GATCTCAGCC CTAGTCTGAC AGTCCTAGAT	300
TTCTGTGAAA TAAGAGTATT CTTCAACTTA GTGCTCACAC TCACATACCA TGAGGGTTCT	360
CTGCAGAGGA CTCGAG	376

(2) INFORMATION FOR SEQ ID NO:600:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 479 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

GAATTCGGCC TTCATGGCCT AAGTCACTAT TTGGTAGCTG ACTTTGTGCC CTGATTAGAA	60
ACGTGGCTCC TTTTC..TGGT AGTTGTTCTT AGAACCTATC AACCTGCAGA GATTTTATT	120
TTCATGGAAG GGAAGTGAAG GTTCTTTCTT TTGCTTCAGA CGGTCACATC TTTAGATCCT	180
GAAGGGAGAG ATGCAGCTTG CTCTCTCCAG AGTCCAAATG CAGCAACAGA TTTTGCCTCC	240
ANGCAAGCAA GATATGCTAT AAAAACCTGC NACATTCCTT CACCAGCTCC TCTCTTTGAA	300
TTTTTCGATGC CTCGATGGTC ATTTTCGAGT GACAGCTTGT AGTGAGATAG CTGTGGCATT	360
GGAAGGGGGG AAGCATGCAC CATTTTCCCT AGGGCCTTCC TGCTTTTGCT TGATAAGCAA	420
TTCTTTGAAT GGCATGTTCT CCACCTCTAG CCACTTTGTT TGTAGTCCCT ACTCTCGAG	479

(2) INFORMATION FOR SEQ ID NO:601:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 483 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GAATTCGGCT TCATGGCCTA CACAGGCATA ACAGTCAGTC GGGAAAAGGT CACTGAAGTT	60
GCCCTTAAAG GTGAAGGGAC AGAAGAAGCT GAATGTAAAA AGGATGATGC TCTTGAAGTG	120
CAGAGTCACG CTAAGTCTCC TCCATCCCCC GTGGAGAGAG AGATGGTAGT TCAAGTCGAA	180
AGGGAGAAAA CAGAAGCAGA GCCAACCCAT GTGAATGAAG AGAAGCTTGA GCACGAAACA	240
GCTGTTACCG NATCTGAAGA GGTCAGTAAG CAGCTCCTCC AGACAGTGAA TGTGCCCATC	300
ATAGATGGGG CAAAGGAAGT CAGCAGTTTG GAAGGAAGCC CTCCTCCCTG CCTAGGTCAA	360
GAGGAGGCAG TATGCACCAA AATTCAAGTT CAGAGCTCTG AGGCATCATT CACTCTAACA	420
GCGGCTGCAG AGGAGGAAAA GGTCTTAGGA GAACTGCCA ACATTTTAGA AACAGGTCTC	480
GAG	483

(2) INFORMATION FOR SEQ ID NO:602:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GGGCCGTGCA	GGCAGTGAAT	CGGAAAGTGG	AGATGATGAA	TGAAAAGAAC	TTGGAGAAAG	60
GACTGGGCGT	GGACAGTGTG	GACAAGGATG	CCATGAACGC	GGCCATCCAG	CAGGCCATCA	120
AGGCCCAGCC	GTCCATGTCT	CCCAAGAAGG	CGCCCCAGC	GCCTGCAAAG	GAGGCCAGGA	180
ATGTCGTGGC	CGTGGGTACT	GGTGGCCGTG	GGACCCACGA	CCGAGACCCG	AGTGAGAAAC	240
CACCCCGGCT	CCAGTGGTTT	GAACAGCAGG	CGAAGAAGTT	GGCAAAGCTA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCGGCC	TTCATGGCCT	AGAACTTTTT	CATCTTTCCA	AACAGAAATT	CTATACCCAT	60
TAAACAGTAA	CTCTCCCTTC	ACCACTCTCC	CCAACCCCGG	AGACCTCTAT	TCTATTTTCT	120
GTCTCTATAA	ATTGCGCTAT	TTAGGTACC	TCACATAAGT	GAAATCATAT	ATTTGCCCTT	180
TTGCATCTGG	CTTATTTTAC	TTAGCATGAT	GTCTTCAAGG	TTCATCCATG	TGGTAGTAGC	240
AGAATTTACT	TCCTTTTAA	GACTAGCATA	CTCACACTGT	TTTTTTGTTT	GTTTGTGTTG	300
TTGTTTGTGTT	TTGGGATGGA	GTCTCACTCT	GTTGCCCAGG	CTGTGGTGCG	GTGGTGCCAT	360
CTCGGCTCAC	TGCGGCCTCT	GCCTCCCGGG	TTCAAGTGAT	TCTCATACCT	CAGCCATCCC	420
TCGG						424

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GCGATTCGAT	GTCCGTGCCC	ACCTGGACCA	CATCCCCGAC	TACACCCCCC	CCTCTGCTCA	60
CCACCATCTC	CCCAGAACAG	GAGTCGGACG	AACGGAAGTG	TAACCTACGAG	CGCTACAGAG	120
GCCTGGTGCA	GAACGACTTT	GCCGGCATCT	CAGAGGAGCA	GTGCCTGTAC	CAGATCTACA	180
TTGATGAGTT	GTACGGAGGC	CTCCAGAGAC	CCAGCGAAGA	TGAGAAGAAG	AAGCTGGCAG	240
AGAAGAAGGC	TTCCATCGGT	TATACCTACG	AGGACAGCAC	GGTGGCCGAG	GTAGAGAAGG	300
CACTCGAG						308

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GGATGCTACA	GAAATCACAG	AAGAAAGCAG	AACTTCTTGA	TAATGAAAAA	CCAGCTGCTG	60
------------	------------	------------	------------	------------	------------	----

TGGTTGCTCC	CATAACAACG	GGCTATACGG	TGAAAATCAG	TAATTATGGA	TGGGATCAGT	120
CAGATAAGTT	TGTGAAAATC	TACATTACCT	TAACTGGAGT	TCATCAAGTT	CCCACTGAGA	180
ATGTGCAGGT	GCATTTTACA	GAGAGGTCAT	TTGATCTTTT	GGTAAAGAAT	CTAAATGGGA	240
AGAGTTACTC	CATGATTGTG	AACAATCTCT	TGAAACCCAT	CTCTGTGGAA	GGCAGTTCAA	300
AAAAAGTCAA	GACTGATACA	GTTCTTATAT	TGTGTAGAAA	GAAAGTGGAA	AACACAAGGT	360
GGGATTACCT	GACCCAGGTT	GAAAAGGAGT	GCAAAGAAAA	AGAGAAGCCC	TCCTATGACA	420
CTGAAACAGA	TCCTAGTGAG	GGATTGATGA	ATGTTCTAAA	GAAAATTTAT	GAAGATGGAG	480
ACGATGATAT	GAAGCGAACC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:606:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 522 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GGTGAATGA	AAGATATACC	TAGAACGCCA	TCTAGAGGGA	GAAGCGAATG	TGATTCTTCC	60
CCAGAACCGA	AAGCTTTGCC	TCAGACTCCT	AGGCCGAGGA	GTCGTTCTCC	ATCATCCCCA	120
GAGCTCAACA	ACAAGTGTCT	TACCCCCCAG	AGAGAAAGAA	GCGGGTCAGA	ATCATCAGTT	180
GATCAGAAAA	CTGTGGCTCG	GACTCCCCCTG	GGGCAGAGAA	GTCGTTTCGGG	ATCCTCTCAA	240
GAACCTTGATG	TGAAACCCAG	TGCATCCCCT	CAGGAAAGAA	GTGAGTCAGA	CTCTTCTCCA	300
GATTCTAAAG	CCAAGACACG	AACCCCACTT	CGGCAGAGGA	GTCGGTCTGG	ATCATCTCCA	360
GAGGTTGACA	GCAAATCTCG	ACTATCCCCT	CGGCGCAGTA	GGTCTGGTTC	CTCCCCTGAA	420
GTGAAAGATA	AGCCAAGAGC	AGCACCCAGG	GCACAGAGTG	GTTCTGATTC	CTCTCCTGAA	480
CCTAAAGCTC	CAGCCCCCTG	GGCCCTTCCC	AGACAACTCG	AG		522

(2) INFORMATION FOR SEQ ID NO:607:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCGGCC	TTCATGGCCT	AGGCGCACCA	AGAGCAGGGC	TGTGTGTGGG	AGGCTGCAGC	60
CAGGATTGCC	TCAGCTCCTC	CCCCTCAGGC	TGGGAGGATA	GCACAGGCTA	GGGGCTCGGG	120
GTGGAGGGTC	TCAGCTCTGC	TGCCCCACC	CCAGTACTAG	CCTAGCTTCC	CAAGCTGTGG	180
CTTAGAGGAT	AGTTGGCTTC	CTGCCTCTCT	CCTCTAAAAT	AGCAAGTCTG	GGAAATCCTG	240
GGGTGAGTGG	AGTCACCCCA	CTCCCAGTTG	CTGGCAGAGA	CTGAGACTAA	AGCATCACTT	300
AATAAACCCC	CCAGCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:608:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

GAATTCGGCC TTCATGGCCT AGTTGTGTAT TCTTTTCTCT GTATCATATG TGATAGTGGG	60
GTAGTGCCAA ACATTGTAA CTCTGATGAA TAATGTCTCT TTTGGTTAGA TCATTCTTAC	120
CTTACTGGTA TCTCTTACTG TTTCTTACC TAGTTATGCT GTTATTGCCT ATGGCTGTGC	180
CAGCTGCCCG AAGCTAACTT GTGAGAGGGA AGGTTGCCAG ACTGAGTTCT GCTACCACTG	240
CAAGCAGATA TGGCATCCAA ATCAGACATG CGATCTACTC GAG	283

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

GAATTCGGCC TTCATGGCCT ACACATGAGT GTGACCTCTG CCATGGGGAA ACACACACAG	60
AGATATCTAT ACATATATAC ATACATACAA ACATAGGCTA TCTTGGCACA CTAAATGCTA	120
AGCACTGTCT TAAGAGGTAG AGCTGGTGTG AGTGAAATTA ATGTTACATT TTCCAGCTGT	180
AAACAGACAT CTGCATTTC TAGTGAGCTG CCAGGAGCCA GATTGCGGAA CCGTAACTGA	240
TGTGCCAGGA ATGGTGCAAT GATTCCCACT TCCAGGGATC TCTCGAG	287

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GAATGATAGG TCCTAGGTTT AACAGGGCCC TATTTGACCC CCTGCTTGTG GTGCTGCTGG	60
CTCTTCAACT TCTTGTGGTG GCTGGTCTGG TGCGGGCTCA GACCTGCCCT TCTGTGTGCT	120
CCTGCAGCAA CCAGTTCAGC AAGGTGATTT GTGTTGCGAA AAACCTGCGT GAGGTTCGGG	180
ATGGCATCTC CACCAACACA CGGCTGCTGA ACCTCCATGA GAACCAAATC CAGATCATCA	240
AAGTGAACAG CTTCAAGCAC TTGAGACACT TGGAAATCCT ACAGTTGAGT AGGAACCATA	300
TCAGAACCAT TGAAATTGGG GCTTTCAATG GTCTGGCGAA CCTCAACACT CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGCCT TCATGGCCTA ACCACATGAT CCTTCGTGTT TCTTGCCTTC CATTTCCTT	60
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GGGTGGATGG	TTGGGTAGGT	GGGGTTTCCT	GGTTTGGGGT	TTCTCAGACA	AGGGCCCTCT	120
AGGGAGGGTG	CCCTGGACCC	CCCACCACTC	CTGGGCTGAG	GAGCGTGTCA	CATGATGCCG	180
TTGGTGAGGT	ACTGGAAGCC	GTCATAGAGT	TTGGTGGTGA	TAGACCGCAT	ACTGCCATCC	240
ACCATCTGCT	CCACCAGCAG	CTGCAGCTGC	TCCTCAGTCA	TGCTCATGTG	GAACCTCTCT	300
TTGAGGTTNC	GAATGGTGCT	GGAGCCATGG	AAGCAAGGAA	GCTGAGAACC	TTGTCCATGT	360
GTTTCCGAGC	GGCAATCAGC	CCTTGCAGCA	TCA			393

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

GAATTCGGCC	TTCATGGCCT	AGGCGGGTTA	AAGTCACATT	TTAAAAAGG	CTAAACTCTA	60
AATTGCTGTA	TTTGCTCTCT	CTGGAGATTA	ACAAAGTGCT	TGGTTTGAG	ATTTGCTGGT	120
ACGGTGATCT	CAATGATATG	ACCGAGGGTG	GGAGGGATGT	GAGGAGGGAA	ATCGGCAAAA	180
CCCTGGCCAG	CCAGCCAGCC	AAGGTGACAC	ACAGCCAGAG	GGGGCTCCCC	TCTCCTCCTG	240
CCGTCCCGCC	ACGGCTCACC	ACGCTGTCCA	CTGGGAACGC	GGCCCCGCGG	CCCGCAGAGT	300
CAGGCGTGAG	CTTCGCCCTT	TTCTGAAAGG	GCCTCCGCCT	GGGCAGGCGC	CGGGGGGCAG	360
TCCTCGGGTC	CCATGGCTTA	GGAGCACAGC	ACTGACGGCT	GCAGTGGCTC	GAAAGGCTGA	420
AATTCCACAT	TGCTCTCTAG	CGATCCCGCA	CTGCTGCGAC	GCCCTCGCTT	CCCGGCTTCC	480
GAGAGGTCCC	GCAGGGAGCT	GCTGAGGGCG	CTGCGCTTGA	GGCCCTCACC	GCTGGCATAG	540
CTGTCTGCCA	GGCAGGCCCG	GCTCAGTGTT	TCCGTTGCC	GACTCCTTTT	TGAGGCTAGA	600
GCACTGGGAC	ATGCTGGGCC	GCACGACGCC	TTTCTGCTTC	TCGAG		645

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GCGATTGAAT	TCTAGACCTG	CCTCGCACCA	CCCCAAATCC	CACATCCTGC	ACCCCTGCCT	60
CAGGCTTCCT	GCCCTCAACC	CCAATATTCT	GAGCCTTCTC	TTTTTTTTTG	TTGTTTTTTT	120
GAGACAGAGT	CTTGCTCTGT	CTGTCGCACA	GGCTGGAGAG	CAGTGGCGCG	ATCTCAACTC	180
ACTGCAACCT	TCACCTCCCA	GGTTCAAGCA	ATTCTCCTGT	CTCAAGTGCC	TAGATACCTT	240
GGTAATGATT	CCATTGGCCC	CACCATGCCC	TGTCTGCCT	TCCTGGCTGT	GCCCAAGCTT	300
GGTCCCTGCC	TGCCTGCCTC	ACTCTCTGGG	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

GAATTCGGCC	TTCATGGCCT	AGGTTTTAGA	ATTTTATATG	AAGTATCTTA	TTTGATT TTC	60
ATAATAACCA	TAGAAGATAG	ATACTATTAT	TATCCTTGGA	TTATAGATGA	AATTGAAGAT	120
TGCTTCGCAG	GTAGAGTTAA	GATCCAGAAT	GGTGACAAGA	AGTATAATGT	CTGCTTTTAT	180
GCCATAATAT	ATCAGACTAT	TCTGACTCAT	TTAGATTACT	TCAGGGCTAT	CACTGAAGCT	240
TACAGTATTA	TCACTACTGT	GATACCCCTG	CTCACACAAT	TTGGTAAGTG	TTTTTGTATC	300
TTTTAGA ACT	TATACATTAG	GCAGCAGCTA	TCTGTTTGGT	CAGCTGAAAG	ACGGCCACAG	360
GATTTGCTTC	TGGGTGGCCA	TTAGCACCTT	TCACCCATGC	ACCAGAGAGA	TACTTCCAGC	420
ACGA ACTCGA	G					431

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

GAATTCGGCC	TTCATGGCCT	ACCAAAATTG	TGCATACCCT	TGGGATGAAA	ATCATTGTAA	60
AGAAAAGAAA	AAAGCAGGAN	TATTTGAACA	AATCACTAAA	ACTCATGGAA	CAATTTT TGG	120
CATTACTTCA	GGGATTGTCT	TGGTCCTTCT	CATTATT TCT	ATTTTAGTAC	AAGTGAAACA	180
GCCTCGAAAA	AAGGTCATGG	CTTGCAAAAC	CGCTTTTAAT	AAAACCGGGT	TCCAAGAAAGT	240
GTTTGATCCT	CCTCATTATG	AACTGTTTTT	ACTAAGGGAC	AAAGAGATT	CTGCAGACCT	300
GGCAGACTTG	TCGGAAGAAT	TGGACAAC TA	CCAGAAGATG	CGGCGCTCCT	CCACCGCCTC	360
CCGCTGCATC	CACGACCACC	ACTGTGGGTC	GCAGGCCTCC	AGCGTCAAAC	AAAGCAGGAC	420
CAACCTCAGT	TCCATGGAAC	TTCCTTTCCG	AAATGACTTT	GCACAACCAC	AGCCAATGCT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

GAATTCGGCC	TTCATGGCCT	AGCGTTCCTG	GTTCCGTCCT	TGTACATAAT	ATTGTACAGC	60
ATTCAACCAC	TTTTGTGAT	CAGCAAAGTA	GTCTCCAATG	GCATTGTTGG	CTTGTTCAG	120
GAGACTGTCA	TCTGCATCAC	CAGATCCAGT	TTTCAGGAGC	TGGAGTACTC	TAAACCAATC	180
CCCCAATTTC	AGCCGGAGGC	CAATAGCAAG	ATCCCTTCTG	TCCATCTCGA	G	231

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

```

GAATTCGGCC TTCATGGCCT ANAATGCTTC ATGAACTNGC NGACAGGACT GACACAGCTN      60
AGCTTTCCTG ACTGATTCCG GGCCATGCAG TCTACCAAAG GGCTAGCTGT TGAGACAATG      120
AGGATCAGGG ACATTGCCC TCGTTCTGAA TGTCCCAGC CACAGTACNT ACATNGTTCT      180
TACATGTACC TTCCCCCTCG GTGACATTTT ATATTTTCCA AGNTGGCCAC ANCNGTTCCC      240
TTCCCTTTCT NNTNGNGNNG NAACTCACA CCCGTCTCTG NGAGGTGAGG CCACATATTC      300
TCTTTTCTGG AATTGGGTG GGCCTGTGAC AATGGCAGGA CAATGCTGAG TGGCTATGTC      360
ATAAAGGCAA TACCCCTTCC ATCCAATTCT CTTGGGATGC TCATGTTTAG AATCCAGCCA      420
CCATGTTGTG AGGAAGCCCA CGTCACCTAT GAAGACCTAC ACAGAAAAGA CTCAAGGCCC      480
CAGGCACTTG AGCTGAAGGA TGA AAAAGAG TTAGTCAGCA GGGGAAATTG GGGAAAGGGT      540
ATCTGGTAGA AAGAAGGAAC AGCTTGTGCA GAGGTNCAGA GGCAAGAGAG AATTGGCAT      600
ATTTGGGAAG CTGCAAAAAGA TCTCGAG                                         627

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(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

```

GAATTCGGCC TTCATGGCCT ACGACTTCAA AAATATGGGA ACACAGTTAG TTATTTTAC      60
ACAGTTCCTT TTGTTTTTGT GTGTGTGTGC TGTCGCTTGT CGACAACAGC TTTTGTGTTT      120
CCTCAATGAG                                         130

```

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

```

GAATTCGGCC TTCATGGCCT ACTGGGGGAG GGAAGGATG TGGTTTGNAG AGNGGAAGCA      60
GAGTTTGGAAC ACGCATGAGA GCAGAGCTTC GTGTGTTCCC ACCCTCANTG AGGANGTGTG      120
AGTGGGTGAG CATGTGAGAG TTGGGTGTTT CTACCCTCAG TGAGGAGGTG TGAGTGGGGG      180
TGCAATATAGA GGCAGTGCCT GCTGTGGGGT CAACTGGT GCATGCCAGC GCCAAAGGGA      240
CCTGTCTTTA GGGGTCAATT CAGCCAGCTC CTCCCATCAC AGATGACAGC TCCAAGCCTA      300
GAAGGGGCTC AGTGACAGGG CCAGGACAAG CCCTCAGGAC TGTGGCCTCC TGGCCCTTGG      360
TTCCCTGCC CCACAACATG GTCTCCACAT GGCTGGCTGG CTGGCTGTCC CTGTGTGTGT      420
GTGACACACG GTGTGAGTGC AGGGCTGTGC CCGGGGTGGG AGGGTGTCTA TGTGGCACTG      480
ACTATCGAGC TCGAG                                         495

```

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGCC	TTCATGGCCT	AGCTGATGAT	TCCAAACATT	TNGTAAATTA	ATTTTCTCT	60
CTTTACCTTT	CAGCTTGGAA	GGAAGACAGA	AGCCTTAACC	TCCAGGGTAA	CATGTTGCAA	120
TTTGTTCACT	TATTAATCTA	ACAAGAATGC	ACTGAGGTGC	TCATTAAATG	TCAGACCTTG	180
TGTGAGGTG	AGGAAATCCA	AAAGCAAAGG	AGGCATGAAC	CTCCATGCCC	ATTCAGAAGG	240
GCACCAGGCC	TTTAAAGAAG	GGTGGATATG	CACAATTTGA	AAATAACTGA	TAGTCCTGAC	300
TTATCTTTGC	AATTAATAAG	GCAATTTTCAT	ACACATTTTA	TACTCGAG		348

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC	TTCATGGCCT	AGCAGGATGG	CACCGGACCC	CTGGTTCTCC	ACATACGATT	60
CTACTTGTC	AATTGCCCAA	GAAATTGCTG	AGAAAATTCA	ACAACGAAAT	CAATATGAAC	120
GAAAAGGTGA	AAAGGCACCA	AAGCTTACCG	TGACAATCAG	AGCTTTGTTG	CAGAACCTGA	180
AGGAAAAGAT	CGCCCTTTG	AAGGACTTAT	TGCTAAGAGC	TGTGTCAACA	CATCAGATAA	240
CACAGCTTGA	AGGGGACCGA	AGACAGAACC	TCTTGGATGA	TCTTGTAACT	CGAG	294

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC	TTCATGGCCT	AGGTCAAGGG	ACAATGAAAA	TGTGACCCTT	ACCAACGACA	60
GAAACTCCCA	GGAAGCCACA	ATTAATCTAA	GACCACCAGG	ATATTTGGGG	AAGTTTATCC	120
TTCTGGAAAC	CAGAATTTCT	GATTTGTGGA	AAATTCTATA	GATATTCTCT	GCCAGACTCC	180
AGCCTATTTG	TGTGAGACAT	CTGGGGAGGC	TCCCCTTTTT	TTCACCATTT	GAGGACTGAA	240
AGTAAATTTA	GCTTCCTCAG	CAGAAAGAAA	AGAAGCTGTT	TTGGAGGTTA	GGAAGAAGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCGGCC	NTCATGGCCN	ACTCTATTGG	TGCAAAGTAA	GATTTACATC	TGTGTTTCAGA	60
ATCTTTGAGA	TAATACCCCT	TTTCTACATT	TCTGCATTTT	TTTTCTGTGA	NCCCCACTAG	120
TATTNCNCCA	TTTTNACCTT	TTCATTTAAC	TTATCCTCAC	ATTATAAGAG	ATGGATGACC	180
TATACAGACT	TGGCCTTTGG	GCTTTGGCTT	CATTCAATAT	CATCTTGGGT	ACCACTGAAT	240
ACCGTTCAAT	CTAGAGCTGG	GTGGTAGGTT	GAGATGTATA	TTTCCTAGCC	CAGATCCAG	300
AATCTAGAAG	AAGTTAAATC	TGATATGACT	TTGATAAATA	AGACAGTATG	TTCTTCTAAC	360
CCCATCTCCC	GTTCTCTGAC	ACTGAACATA	TATATGAAGT	ATATATAACA	TATACCGAGT	420
ATTTAAATTT	TTAGAATAAA	AATGTGCATT	ACTGCACATC	TTCTGTCTT	TCATTCTCTG	480
GTTGAGTTTC	CCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:624:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCGGCC	TTCATGGCCT	AGAGCAAGCA	GAGGTGGCCT	GCGTGTGTAT	GTGCTCATGT	60
GTATGTGTGC	ACATGCAATG	CTGTGTGTGG	ATGCCCATGC	GTGTAACATC	TGATGTGGCA	120
CATGATACAA	CATAATTTAT	TTATTATAGA	AACCTGCAAG	TAAAGATTCA	AGAGGAATCG	180
CAGATCCCAA	TCAAAGTGCC	AAGTGGTAGG	TTACCCTGAC	AGATAGTACC	TCCCTTTTTT	240
ATTTTTCAAA	TGCTGGCATA	GTTTGTGTGT	CTTACCAAC	TCATTGATTT	ACTGGGGACA	300
TCCTCTGTAC	TTATCACAAAC	AGGTTCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:625:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAAGTTGCAT	TACACCTTCT	CTTCTGAAGT	AAACACTAAA	AATATCAGGT	AACTTCTGCA	60
TTAAAATTTT	TGCCATCTGA	AGTGCTCCCA	CTTACTATCT	TCAGGTCTTG	GCTTGACAGC	120
ATGGAAGCAA	TGTGACTTGA	AACAGCATGA	TTTTTCAGAA	CATCCTTCAG	AAGTTCAGCA	180
TCCGCAAAAT	AAATTATCCT	AAGAATTGCT	CTAAGGCACT	TATGTCTGAC	CGCAGGTCCT	240
GCTGAGGAAC	TATACACTTC	ATAAAGAACA	CCAAATAATG	TCTTAATAAA	AGACTTAGCC	300
AGTTCCGGAT	CCTCTTTTCAT	AAGCTGTGCT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:626:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 371 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

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GAATTCGGCC TTCATGGCCT AGTCGGATTC CCAGTGGAAC TTTAGTAGTA CTCAGATCCT      60
CCTTTGTTTG GTGCGTAGTA TATTAACAAG TAAACCTGCC TGTATGCTCA CCAGAAAGGA      120
AACAGAGCAT GTCAGTGCTT TGATCCTGAG AGCCTTTTTG CTTACAATTC CAGAAAATGC      180
TGAAGGCCAC ATCATTTTAG GAAAGAGTTT AATTGTACCT TAAAAAGGTC AAAGAGTTAT      240
AGATTCCACT GTATTACCTG GGATACTCAT TGAAATGTCA GAAGTTCAAT TAATGAGGCT      300
ATTACCTATC AAAAAATCAA CTGCCCTCAA GGTGGCACTC TTTGTACAA CTTTATCCGG      360
AGACTCTCGA G

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(2) INFORMATION FOR SEQ ID NO:627:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 522 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

```

GAATTCGCCT TCATGGCCTA GATGTTTCAA TTTCGAAGTA CTTTGAAGT TTAGTAATGT      60
CAGAGTTGAA CATTCTCTGT AGCATGACTA TCGACTTGTC TTTTCAAGGC AGCCTGCAAA      120
GCCATTGAAC AAGCAAAGAC TCAAAACATC AATAAACTGG TTCTGTATAC AGACAGTATG      180
TTTACGATAA ATGGTAAGCT TTCACATTG ATTTCTTCTG TTTTCCAGT AACTGTGAAG      240
GGAAATTGGT AGGAGGTGTT GTAACAGGGC AGGACCCAAA TGGGAACGGG GGGATGACAT      300
TGGTTTGTC GGTACCGAGC AAAGAGTGAG GATTTTGGAG TCTCCCTTCT GCTGCTCTGA      360
TGTTTTCCAC ATGCTTATTT CTTTGCCAGG CACTGGAGAT GCAGTCAGAA GTGGAAGTGG      420
CTCTTACTTC TAGTCTGTGT GTGTATAAGT CACTTAAGAT GGCGTGTTGA CTGCTTCTTT      480
GGGAAATGCC CTGAATAGGA GCATGTAGGG GATGTGCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:628:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 212 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

```

GAATTCGGCC TTCATGGCCT ACAAATATC TGTGGGAAGG TGAGCTACTT AGCATTCAAC      60
AATGCAAAGT TTCAAAGCAT TTTGCAAATT TTAATATAC GCTATAATTC TTCTGTAATT      120
GGTGTCTTTG GTACTTTTTG GGTAAATTGG AGTTATTCCA AAATAATTAT ATTTTATAGC      180
ACTTTTGACA CCATAACACT TAGCATCTCG AG

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(2) INFORMATION FOR SEQ ID NO:629:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCGGCC	TTCATGGCCT	ACTCCTTCCG	CGCGAGTCTC	TGGAGAAGCC	GCAGCGCGAG	60
TTGCCGCCGC	TGCTGCCCGG	GGCCGGCTTG	CCTTGCGCCA	TGGACTGGCA	GCCAGACGAG	120
CAGGGCCTGC	AGCAGGTCCT	GCAGCTGCTC	AAAGACTCAC	AGTCGCCCAA	CACAGCCACT	180
CAGCGCATCG	TGCAGGATTA	ACTCAAACAA	CTCAATCAGT	TTCCTGACTT	CAACAACACTAC	240
CTGATTTTCG	TCCTGACCAG	ACTCAAGTCA	GAAGATGAGC	CAACGCGCTC	TCTCAGTGGC	300
CTCATCCTCA	AGAACAACGT	GAAGGCACAC	TATCAGAGCT	TCCCACCCCC	CGCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:630:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 168 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

AAGAGAACAA	TAAATAGGC	AGTCTCCTAC	CTCTTGCTCT	ACTCTAATAT	AAACTCCATG	60
AAGATAAGTA	TTGTATCCAT	ACTGTTTCATG	CTGCACAGCA	GTTGCCCTTA	TCTGCAGGGC	120
GACGCATCCC	AAGACCCCCA	GTGGATGCTT	GAAACTGCAG	AACTCGAG		168

(2) INFORMATION FOR SEQ ID NO:631:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GAATTCGGCC	TTCATGGCCT	ACATAACTGC	ATTCTGACCT	CCTTCTTGCA	GTGCCAAGAG	60
AAATGATGGT	GAATAAGTG	CGGGGTGTGG	GGTCGTTCTC	AAAATGCGGT	CATTGCTACA	120
GAAGTAGGGT	TTTTGGTTAG	TTACATNCTT	TGTGGAAGGA	CAGGGTGGTG	GGTACAGGTC	180
CCTGAGAAGC	AGACATGTGG	AATTGTTTGA	GACAATCCTA	CTCCCTGTGG	TACTCTCTCT	240
ATGTATATAT	TCCAATGAAG	GTAATTTACC	TCATGCTTTC	CTAAATACAT	AAATCTTTAC	300
ATTCAAATG	CCTTGTTAGA	CTGTACTCAA	GATTCCAGAG	ACATTTTAAA	ATAATTCATT	360
TTCAAATCAT	AAATTGGGGA	AANGGGGCCC	TGGGATAAGC	AAGTTGACTG	GGCCACTGCT	420
TATGCCATTC	CCTGCACAAT	TCTGGGCATG	GAGCAGCTCT	CCCAGAGCCC	ACTCGAG	477

(2) INFORMATION FOR SEQ ID NO:632:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAATTCGGCC	TTCATGGCCT	ACTGCCTCCT	GATGAAGTCC	CTACTGTTCA	CCCTTGNAGT	60
TTTTATGCTC	CTGGCCCAAT	TGGTCTCAGG	TAATTGGTAT	GTGAAAAAGT	GTCTAAACGA	120
CGTTGGAATT	TGCAAGAAGA	AGTGCAAACC	TGAAGAGATG	CATACAAAGA	CTACAAGAAT	180

TTCAACAGTA ACAGCAACAA CAGTCAACAA CAACTTTGAT GATGACTACT GCTTCGATGT	240
CTTCGATGGC TCCTACCCGT TTCTCCCACT GGTGGAACAT TCCCAGCCTC NGTCTCCTGC	300
TCTAGGATCC CCGACCCATT AAGACTCGAG	330

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC TTCATGGCCT AGGAGAAGGC CCTGCAGGCC GCATATGGCG CCAGCGCCCC	60
CAGTGTGACC TCGGCTGCCC TCCGGTGGAT GTACCACCAC TCACAGCTGC AGGTAACCAG	120
CGACCCCTGGG TGCTCAGCTT CTTCCCTTCC AGGGGGACCA GCGTCACCTT TAGGTGAAGC	180
CCAAAGCATT TGATTCTGA ATTCCCTCTGA AATTTTCTT TCTTCCAATT CTCATAAGCA	240
CTCTTCCAC TGGTCTTTGA TGGTATCTGA GTGGAGGCTT TGTAGTGAGG GATTTTCATT	300
ACAGGGATT TCTTATTCCT TAGGCTTCT GAAGTATGAT TATCCCAGTG TTATTGATGA	360
GGAAACCGAG GTTCAACCAG CTATTCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

GAATTCGGCC TTCATGGCCT AAGTACAAAT ACCTATTATG TTGGTTGGGA ATAAGAAAGA	60
CCTGCATATG GAAAGGGTGA TCAGTTATGA AGAAGGGAAA GCTTTGGCAG AATCTTGGAA	120
TGCAGCTTTT TNGGAATCTT CTGCTAAAGA AAATCAGACT GCTGTGGATG TTTTTCGAAG	180
GATAATTTTG GAGGCAGAAA AAATGGACGG GGCAGCTTCA CAAGGCAAGT CTTTCATGCTC	240
GGTGTATGTA TTCTGCTGCA AAGCCTGAGG ACACTGGGAA TATATTCWAC CTGAAGAAGC	300
AAACTGCCCC TTCTCCTTGA AGATAAACTA TGCTTCTTTT TTCTTCTGTT AACCTGAAAG	360
ATATCATTTG GGTGAGAGCT CCCCTCCCTT CAGATTATGT TAACTCTGAG TCTGTCCAAA	420
TGAGTTCACT TCCATTTTCA AATTTTAAGC AATCATATT TCAATTTATA TATTGTATTT	480
CTTAATATTA TGACCAAGAC TCGAG	505

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

GAATTCGGCC TTCATGCCTA CAAATATGTC CTCTGTCAAG ACCCCTGAAA CAGTTGTCCC	60
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CACAGCCCCT	GAGCTCCAGA	TTTCCACCTC	CACAGACCAA	CCTGTCACCC	CTAAGCCCAC	120
ATCTCGGACC	ACTAGGAGCA	GGACAAATAT	GTCTCTGTG	AAGAACCCTG	AATCAACTGT	180
CCCTATAGCC	CCTGAGCTCC	CACCTTCCAC	CTCCACAGAG	CAGCCTGTCA	CCCCTGAGCC	240
CACATCTCGG	GCTACTAGGG	GAAGAAAAAA	TAGATCCTCT	GGCAAGACCC	CTGAAACACT	300
TGTCCTCCACA	GCCCCTAAGC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:636:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 201 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

GAATTGGCCT	TCATGGCCTA	GCTTCCTCTT	CAAAAATGTG	TCTACCTAAG	ATACTATTAT	60
TTAAGCCTCT	GTGTACTTTT	AACCGTAGAA	CTGATTTTAT	AGGAAGACGA	AACCTGTGCG	120
CTTTCAAGAC	ATGGAGTGTG	TGCCTTGTGG	AGACCCTCCT	CCTCCTTACG	AACCGCACTC	180
TCATCCACAA	AGAACCTCGA	G				201

(2) INFORMATION FOR SEQ ID NO:637:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 417 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GAATTGCGCC	TTCATGGCCT	AGGCAAAGCC	TGAAAGTCCT	TGGACTTCTC	TGACCAGAAA	60
GGGAATTGTT	CGAGTTGTAT	TTTTCCCCTT	TTTCTTCCGG	TGGTGTTTAC	AAGTAACATC	120
AAAGGTCATC	TTTTTCTGGC	TTCTTGCTCT	TTATCTTCTT	CAAGTTGCTG	CAATAGTATT	180
ATTCTGCTCC	ACTTCTAGCC	CACACAGCAT	ACCTCTGACA	GAGGTGATTG	GGCCGATATG	240
GCTGATGCTG	CTCCTGGGAA	CTGTGCATTG	CCAGATTGTT	TCCACAAGAA	CACCCAAACC	300
TCCTCTAAGT	ACAGGGGGTA	AAAGAAGAAG	GAAATTAAGA	AAAGCAGCCC	ATTTGGAAGT	360
ACATAGGGAA	GGAGATGGTT	CTAGTACCAC	AGATAACACA	CAAGAGGAAT	GCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:638:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GAATTGCGCC	TTCATGGCCT	ACCCTCCTCC	AATGAGTCCC	GCCAATGCCC	CAATGCCCCG	60
TGCCAGTTCG	CTTTCTACGG	TGGTGAGTCG	GGCTACCACC	GGGCCCTGCT	GGGCCTGCAG	120
ATCTTCAATG	CCTTCATGTT	CTTCTGGTTG	GCCAACTTCG	TGCTGGCGCT	GGGCCAGGTC	180
ACGCTGGCCG	GGGCCTTTGC	CTCCTACTAC	TGGGCCCTGC	GCAAGCCGGA	CGACCTGCCC	240

GCCTTCCCGC TCTTCTCTGC CTTTGGCCGG GCGCTCAGGT ACCACACAGG CTCCCTGGCC 300
TTTGGCGCGC TCATCCTGGC CATTGTGCAG ATCATCCGTG TGATACTCGA G 351

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GAATTCGGCC TTCATGGCCT AATTTTITTTG AGACAGAGTC TTA CTCTGTT GCCCAGGCTG 60
GAGTGTGGTG GTGCGATCTC GGCTCACTGC AACCTCTGCC GCCTGGGTTC AAGCTATTCC 120
CTGCCTCGGC CTCCCAAAAT ACTGGGATTA CAGGCGTGTG CCGCTGTGCC CAGCCGCTGT 180
CTAGTCTTTT AAAACTTGGT GTTTGAGCAT GCACATTCTC CTTCTGGAAT ACCTGATCAC 240
CCAGCACAAC TCACGTTNTC TTTCTGCTGG CTACCTTGC CTTGCTGTGA CTGTGTCATG 300
GTTCTCAGCT AGACTCGGTG GCGTGTGTTGA TGGCCAGGC ATCGTCTGCC CAGTGGGTGT 360
CCTGTTACCC ATGTATGACA GACTGTACCC AAGATATCAG TCTTACGAAT AAGGCCACGA 420
TGAACACTTT GAGCTTTTTC TGTATCTAGC ATATCCCCAG GGTAGATGCT CAGGCAGGAA 480
ACTGGTGGGA GATGAGGGAT ACACAGATGG CTCCNACAG GTGCTGTGAG GTGCTCAGGA 540
GTTTATCATC ACTTAACTGA GCTCGAG 567

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCGGCC TTCATGGCCT AGCTCCGCAN AGGTAGGGAG GGAAGGGCCC CTCAAATANA 60
TGGAGGGAGC AACATCCCTC CAAGGGAAAG GGCTTCCAAN ACNAAATCCT GGACAGAAGC 120
GGAGCANGGG ATGGGCCTCC TTACAGAGCA GGAGGAAGAC AGCGCTCTTC NAANANGAAA 180
GGAGAGGGGC ATCAAGGTCC CTCACAATGG TGGAGGGGCG GGGGCTTCTC ACCGAAGGCA 240
GAGGAGGGGG CCTTAACTGA GGGGCAGGGC GCCTCCCAGG GATGAAAGGA GGAGGCCTGC 300
CGCAGAGCAG GGAAAAAGTT CAGTCCTTTC CTGCATTCTT TGGCTGAAGG GGTCTTAAGA 360
TGAAGGGTTC AGTGTCCAGA AGGAAAAAAC CCTGAGATGG GCCTAGACCA ACATGAACTC 420
AGCTAGCAAG TTCATACATG ACATGGGACT GATAGACTTG TGTGGCATCT CGAG 474

(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

GAATTCGGCC	TTCATCCTTG	AGAATATCAG	AATTAGAAAG	CCAGGTTGTT	GAAATGCATA	60
CTAGTTTGAT	TTTAGAAAAA	GAACNAGTAG	AAATTGCAGA	AAAAAATGTT	TTAGAAAAAG	120
AAAAGAAGCT	GCTAGAACTA	CAGAAGCTAT	TGGAGGGCNA	TGAGAAAAAA	CAGAGAGAGA	180
AAGAAAAGAA	AAGAAGCCCT	CAAGATGTTG	AAGTTCTCNA	GACAACTACT	GAGCTATTTT	240
ATAGCAATGA	AGAAAGTGA	TTTTTAATG	AACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:642:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 413 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

AGGGAGAGGA	GGCTGGGAAC	AACGTGACCC	ACTAAGGATT	CTGCTCCAAG	GACAGTGGGT	60
TTCCCGCTGG	GCACCCACTC	TTAAGTGCAG	ATCGGGAGAC	TAAGACAGGA	ACACCCGCCG	120
TGGGCAGGCC	AGGCTGGAAG	GATAGAGGAC	TGTGGTCGAA	CCAAGAGGAG	GTTCAACTGT	180
GACTTATGCC	AGTGTGGTCA	CGAAGGCAGA	TGGGTTGAAC	TGAAAAGGGG	GCACCGGTTT	240
CTGGCATGGA	GGCACCCAAG	GTCTTAGGAG	GTGGATGGAC	TGTCACATGG	GCAAAGAAAT	300
GTCCAGGGC	AGGACTGCAA	AGGCCACAGA	AGAATAATTT	GGGAGAGAGA	CAACCCATGA	360
GAAGTCACTC	AGACCAGGGT	CAGAAACAGA	ACAGGAACAA	CAATGGACTC	GAG	413

(2) INFORMATION FOR SEQ ID NO:643:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 658 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

TTTCNTCCCT	TNGAATGTTT	GTCCCTTTTT	CCTGTTTTTT	TTTCGCACAA	AATTNCAAGT	60
TNTACCAAGC	AAACATTAAA	TCCAAGTTGG	AATTTTAATT	AAGGAATTTC	GCCTTCATGG	120
CCTACTGGTG	CCTTCCCGGA	AGGGCTCAGA	GGCGGGCTCG	GGCAAGCACT	TTAACCTTTT	180
AAGCCCAACC	AGATGAGTTG	CCTGCAGTTT	TGGAGGCCCT	CAGAGCATTT	CACTAGACCT	240
CTGTCTGTGT	CGGTCCAATG	TCTTTAGCCA	AGCTTTGATT	AAAGATGACT	TCCTTGTTTG	300
CTCAAGAAAT	TCGCCTTTCT	AAAAGACATG	AAGAAATAGT	ATCACAAAGA	TTAATGTTAC	360
TTCAACAAAT	GGAGAATAAA	TTGGGTGATC	AACACACAGA	AAAGGCATCT	CAACTCCAAA	420
CTGTTGAGAC	TGCTTTTAAA	AGGAACCTTA	GTCTTTTAAA	GGATATAGAA	GCAGCAGAAA	480
AGTCACTACA	GACCAGGATT	CACCCACTTC	CACGGCCTGA	GGTGGTTTCT	CTTGAGACTC	540
GTTACTGGGC	ATCAGTAGAA	GAATATATTC	CCAAATGGGA	ACAGTTTCTT	TTAGGAAGAG	600
CACCATATCC	TTTGCTGTT	GAAAATCAAA	ATGAAGCAGA	AAATACCATT	CCCTCGAG	658

(2) INFORMATION FOR SEQ ID NO:644:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

GAATTCGGCC TCATGGCCTA CCAAAGAGTG TTATACATGC TCAGCAAACA ATATCTACAG	60
GAACTAGCCC TCAGGAAAGT AAAAAAAAAA AAAAAAAAAAAG GCAGCAGAGG GCCAGCCCAT	120
TCTTCTCATA GCTCACTGAT ACACTTGGTC ACATTCTGCC ACTACCTGCA AGGGAGGCTG	180
CGGAAAGGTA TCCCTACAGA GGCAGACGTG CCCAGCAAAA ACTTTGGCCG GTGGGGGGAC	240
ACTCCATGAC AAAAAATACA AAGGAGAGAA TGGGAGCTCG AG	282

(2) INFORMATION FOR SEQ ID NO:645:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 172 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

GAATTCGGCC TTCATGGCCT ACCTTTCTCT GACCTGTGCC CTCGGCCTCT TGGCCTCCAT	60
CGCCATGACC TTTGCCACCC AGGGCAAGGC ACTGCTGGCT GCCTGCACTT TTGGGAGCTC	120
TGAACTACTG GCCCTCGCAC CTGACTGTCC CTTGACCCC ACACCACTCG AG	172

(2) INFORMATION FOR SEQ ID NO:646:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 293 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

GAATTCGGCC TTCATGGCCT ACCAGAAACC GGCCAGGCAA GGAAAGAGGC CGGTCACCAG	60
AAGCCAGCAG GCGTGGGGTG TGATACTCTC TATAGCCACT ACAGGGCGCG CGCAGGTCGC	120
GGATCTCCCC AGTTGCTAAT CCCGCTCTG CCACTCAATC CTATCCCTAG TTCCCAGCGC	180
CGGGTCCCCC GCCTTGCACT CTCCAGCCGT GCGGGGCCGG GAGCAGGCCT CCGGCCTCCC	240
AGACTTCTAG AGCCCGCCGG GCCCATCTTT GTACTCATCC ACCCCGGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:647:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

GAATTCGGCC TTCANGGCCT ACAGAAACAG AAATGCTAAC TGAAATGTAT TCTTCTAACA	60
AAGCATTCTT AACTTTCTAG AATGTAGTCT TTCATTTTTC TTTATCTTTT TTCAGCTTAT	120
TCCCAATAT ATACTTTGGC CATTTAAATA AATGGCCAAA GAAATGGCCA AAAAAAGCTT	180
TATTTAGTTT TTGTTTTATT ATGAAGGATG ATTACTCTTT AATGCTGCTA AATTCCTTTC	240

TAGCTCTGTA TTTCACCTCA AGAAAACCTCG AG

272

(2) INFORMATION FOR SEQ ID NO:648:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

GCGAGCTGTT GGGATTACAA AGTTGCGCGT TTCATCGGTA CAAACTGGTC TTTGAACCTC	60
CTTTGTGAGA GCAATTGTAG TGTCCAAATT GTTAGGGAAA ACAAAAAAAA AAAATCCCAA	120
GGAGGAGGGT TTTTCCCCT TCCCTGTTG GTTTATCACA GCATTTTGCT TTTTTTTTGG	180
CACAGCTTTT TACGTTCTT TCCATTACGC CATCACAGAG CCGTTCCGG GTGGAAACCA	240
ATCCACACGC CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:649:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCGGCC TTCATGGCCT ACCCACCTTG GCCTCCCACA GTGCTGGGAT TCCAGGCGAG	60
AGTCCCTGCG CCCAGCCCCA CTTGTCTATT CTTGTTTTTG CTGCCTGTTT TTGGTGTCTT	120
ATCTGCACAT GAATATTAT AGCAGCTTAT TGCATAATTG CCAAACTTG GAAGAAACCA	180
CAATGACAAT GTCCTTCTAT AGGTACACCC ATACAATGGA ACATTCAGTG ATAAAATGAG	240
CCATCAAGCC ACCCAAAGG CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:650:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 490 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GATTTCTCAG CTTTGAACA GAGTGGACTT GTCAATATCA GAGCAGAGCA CCAAAGTGAA	60
GATGTCTCAC AGAGACAGTA ACCACCAGCT TCAGCTTTTG GACACTAAAT TTAAAGGTAC	120
AGTTGAGGAA CTCAGTAACC AGATATTATC TGCACGGAGT TGGTTGCAAC AGGAACAAGA	180
ACGGATAGAA AAAGAGCTTT TACAGAAAAT TGATCAGCTT TCCTTGATTG TTAAGGAAAA	240
CAGTGGAGCC AGTGAAAGGG ATATGGAGAA GAAGCTCAGC CAGATGTCAG CCAGGCTTGA	300
CAAAATAGAA GAGGGTCAAA AGAAGACTTT TGATGGTCAG AGAACAAGGC AAGAAGAGGA	360
GAAGATGCAC GGGCGAATCA CCAAGCTGGA GTTACAGATG AACCAGAACA TCAAGGAAAT	420
GAAAGCAGAA GTTAATGCTG GGTTCACAGC CGTCTATGAA AGCATAGGAT CCCTCAGGCA	480
AGTTCTCGAG	490

(2) INFORMATION FOR SEQ ID NO:651:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 498 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GAGATAGAGG GGACCCTGGC TATGGACATT TTGAATTATG TCGGGAGAGC TGATGGANAA      60
AGAGGCTCCN GGAGGACTGG TTAAACTGAA GCCNGGAATG AGATGAAATG TATAAAATTC      120
TCTTGAATGA TTATGAATAT CGTCAGAAAC AAATCNTAAT GGAAAATGCA GAACTTAAGA      180
AGGTTCTTCA ACAAATGAAA AAGGAAATGA TTTNTCTTCT TTCTCCCCAA AAGAAGAAAC      240
CTCGAGAAAG AGTAGATGAT AGTACAGGAA CTGTTATTTT CGATGTTGAA GAAGATGCCN      300
GGGAAC TAAG CAGAGAGAGT ATGTGGGACC TTTCTGTGTA AACTGTGAGA GAGCAGCTTA      360
CAAACAGCAT CAGAAAACAG TGGAGAATTT TGAAAAGTCA TGTAGAAAAG CTTGATAACC      420
AAGTTTCAAA GGTACACCTG GAAGGTTTTA ATGATGAAGA TGTAATCTCA CGACAAGACC      480
ATGAACAAGA AACTGAAA

```

(2) INFORMATION FOR SEQ ID NO:652:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 203 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAATTCTTCT TTCTCTATAA ATTTGCCTAC TATTGAAGAT TCTTCAGAGG AAGAAGAATT      60
GAGAGAGGAA GAAGAATTAT TAAAGGAGCA AGAAAAGCAG AGGGAAATAG AACAGCAACA      120
AAGAAAGAGT TCTAGTAAAA AATCAAAGAA AGACAAAGAT GAACTTCGAG CTCAGAGAAG      180
AAGGGAAAGG CCAAAGACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:653:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 242 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GGAAAGAAAN GGACAAACCT ATAAATTAAC TCAACCTATA TCTCCCTTGA AAATACTTTC      60
AGGCTCCACC AAAACGTAGA ACTGAAAGCA TGTATTTTGG AAGAAAGAGA TACATTTTGT      120
ATGCTTTTCT TTTCTTTTGT AGATTCCAG TTTATTTTCT AAGACTGCAA AGATCACTTT      180
GTCACCAGCC CTGGGACCTG AGACCAAGGG GGTGTCTTGT GGGCAGTGAT GGGGNCCTCG      240
AG

```

(2) INFORMATION FOR SEQ ID NO:654:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```
GATTCGGCCT TCATGGCCTA GGGAGGAGAA GAAGGGGGAG AAATCACAAA GAGATTGGGG      60
AGGAGATGAA GTAGCAGGGC TCAGCGATTC TTTCAATTCC AGTGCACACC CAATAGTGTG      120
TTGGAAGAAT GCACACTGTT CGGGATTGTG GGGAGAATTG TCCCATGACA AAGGAGGCAG      180
GGTTATGCTT GTTATAGTCC AATAAGCCGT GCCAGTCAAA CAAGAACCCA CACTCCTCGA      240
G                                          241
```

(2) INFORMATION FOR SEQ ID NO:655:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```
GAATTCGCCC TTCATGGCCT AGTGGTGAGA CTGAGCAGAT TTAATTAATG TCTGTTATGT      60
TCAGGGCACA AGGGTGAGCT CTTTCGAGGG GCTGATGCAC TGGGTGTGGA GCTGAGCAGA      120
GAGGCCTAAC CAGGATCAGG CAGGAGGGCA GGGATGGTGG CAGCCATAGG AGGGCAGGGT      180
AGGGTAGGGC CTCTGAGGAG GAGGGAAAAA GTGAAGGAGA GGCTTTGGAC CTGGTGACAG      240
AGTGATCAGA TGACAGAGGG GTTTTGGGA GACTCGAG                                278
```

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 224 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```
GGAAGGAGAA GTGGAGAAGA AATCAGTCAG CCGCAGTGAA GAGCTCAGAA AAGAAGCAAG      60
ACAATTAAAA CGGGAAGTCT TAGCAGCAAA ACAAAAAAAA GTAGAAAATG CAGCAAAACA      120
AGCAGAAAAA AAGAAGTGAA GAGGAAGAAG CCCCTCCAGA TGGTGCTGTT GCCGAATACA      180
GAAGAGAAAA GCAAAAGTAT GAAGCTTTGA GGAAGCAACT CGAG                                224
```

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

ATACAGTAAT CAAAGTAAGT AATATTTCAA TCCAATATTT TTAAAAATCA GAATTAATGC	60
AAAAAAACC ATGATGAACA AAATATTTAA ATTTAAATA AAGACAGGAT TAGTATTACT	120
GAGTTTTCCT TTGTCCCAG GCTCTAATAT GGCTTGGCAT GGGGCAGAAC ATTACAACAT	180
ACCACTCGTG TCATGGTGCC CAAGGCTCCA CAGACCTCAG TGGCTCCCTG CTGCCTGCCA	240
CAGCAATCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

GAATTCGGCC TTCATGCACT TTTGAGCATC AGTTTCTTTT CACTCCTTCT TCATGTGCTA	60
TTCCTTCCAA ATCTTTCCCA CTTTCTTCTT TCTCTCTCT GTCTTTTCTT CTCCCTCTT	120
TGTTGTTCTC TGGTTTCCAT CTGTTTCTCC TTCTCCTTCC CCATTTCTCA CTATCCTCTC	180
TTCTGTCTCC TCACTTACTT CTCCATCCCT CCTCTCTCCA GCCCTCTCTC CCCCCTGTCT	240
CGAG	244

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC TTCAGCCTAG TCTCAAATT CAAGCAAACC TCCTGCAATC CCAGCGCTTT	60
AGGAGGCCGC TCGAG	75

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GCNTTCATGG CCTAAGTTCA CCTTAAATC TTTCATGACC ATTTCCAGAN GCCCTTACCG	60
TGGGCTATCT TAGCTTGATG TGCTAATCAA GTTCCCCCTA ATTTGACATA CTAGAATCTA	120
ATACTAGAGG CAGCATGACA TTATTAAGGG GGAGGAGGT GAGAAGCACT AACCTCGAAG	180

TTAGAATFTC	TGGTTTGTCA	TCCAGTCTG	CTAATTAGCT	TTCTGATTTA	AGACAAAATA	240
CTTTTCTGT	GCCTTCTGGG	GGTCAAATTC	GATTTTAAAG	ATTCTCTCAG	TTGGAAGAAA	300
TCTAACTAAA	AATATACTTA	AAATAATTCT	TTGGTAGTAT	ATTATTTTGA	AATTTGGTCC	360
AGAATCCTAT	TTGTTTATTC	CTGTAGTATA	CATACATCTG	TAGTTACCCA	GCAAGCGCGC	420
TCCCTATAGT	GAGTCGTATT	AATTTTCAGAG				450

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

GAATTCGGCC	TTCATGGCCT	AGAGAAAAAA	AATTAGAGTG	ATTTTCAGGAC	TCAAAGGAAG	60
AGCCTTGCAA	AGAGTTGGGA	GGATTAAACT	CTATGGATTT	AAGCTCTGCC	TGCAAAATAA	120
CATCGCTGGG	AATTTAGACA	CAAATTAGGA	ATATTCTGGA	ATTCATTTAG	CAGCAAATCT	180
CCTGACTAGT	TGTCAAATGG	AGCTGTTCTA	ATTGGCCTGT	TCTAAATGGG	CCTGTCCTAA	240
TTGCAGAAAT	ATTGCAGAAAT	ATGTTTTTAG	TAAGCTCTCT	ATAGAAAGTC	ACCTCTGAGT	300
TGCTCAGCAT	TTAGATTCAA	ATATCAAAT	GTTTTTAA	AATGCCAGCA	TATCAATTAT	360
ATTTGAAGAA	CAGTATAGAG	GCTTGAAACA	TGCCAAACAG	CAGGGAACAG	GAATAACCTT	420
TAATGAGTGC	CTACTCTGGT	GCAGGGTCCT	TTACACACAT	TACATTATGT	GATCTTCACA	480
ACAAACCGAC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	ACGAGGAAAG	60
GTCAGAGAGA	TGCGAAGTTT	CTGGCTTTGA	AGATGGGGAA	AGGTCTCCAG	CCAAGTGTGA	120
GCAGCCTCTA	AGAGTCAGAG	AAGCCAAGGA	ACAGCTTCTA	CTCTAGAGCC	TCCAGAAGGA	180
TGGCAGCTCT	GCTGATGTCT	GGCCTTATCT	CAGGGAGCCC	TGTTGGATTT	TGAGCTGGTG	240
GAAGTGTGAG	ATAATGACTG	TGGTGTTTAA	GCCAGTAAGT	TGGTGTAAAT	TGTTAATGTG	300
ACTGCAGAAA	CCCAATAGAC	CGAGTGCGTG	TTGGGCTCTC	CCTGTACAAA	GGCAGAGGGA	360
CAGCAAGTGT	GAGCAGGCCC	TGCTGTGAGG	TAGAGGGCAT	CCTCTGAAGT	GTGTGGGGAA	420
GGGGGAGCCT	CACATGAGCC	CAGGGCTGCC	ACATGTTTCA	TCTGAGCGCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:


```

GAATTCGGCC TTCATGGCCT ACTCTACTCG TGCGGTGCTT CTTCTCCTTG GCATACAGCT      60
CACAGCTCTT TGGCCTATAG CAGCTGTGGA AATTTATACC TCCCGGGTGC TGGAGGCTGT      120
TAATGGGACA GATGCTCGGT TAAATGCAC TTTCTCCAGC TTTGCCCCCTG TGGGTGATGC      180
TCTAACAGTG ACCTGGAATT TTCGTCCTCT AGACGGGGGA CCTGAGCAGT TTGTATTCTA      240
CTACCACATA GATCCCTTCC AACCCATGAG TGGGCGGTTT AAGGACCGGG TGTCTTGGGA      300
TGGGAATCCT GAGCGGTACG ATGCCTCCAT CTTCTCTGG AACTGTCAGT CAACCTCGAG      360

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(2) INFORMATION FOR SEQ ID NO:664:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

```

GAATTCGGCC TTCATGGCCT ACCCTGTGAA AGTGGTGCCT GACTGTCTGA GGAGGGACGT      60
GGGCTAGAGA GTTCTCCCTG GGCTCAGGAA GGATAGCTTG GTTGTAAGG GAATGCAGTG      120
TGGATGACAC TGAGGCTGCC AGAGGTCTTG GTTGGCTGC TCCTAGGTGG CTTGATGAAA      180
ATGGGAGGAC CAGAAGAATT GGAAGTTGCA GCCAACTGAT GGCTGCTACT GAAGATTCCT      240
GACAGGAAAT AGAAAATAGG ATGTAAGACC CTCCTCTCCT CTTCTGGCT CCCAATATTT      300
TCTGGTGATT CCCATTGGTG GATGCTAACA GGAATCACC TGGCAAGGGA GCTTGAGACA      360
TGTAGTTTGA GAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:665:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 206 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

```

GAATTCGGCC TTCATGGCCT AATCACACAC CAACAAAACA CATTTATTTT GTAATTTATT      60
TTCTCCTGAT ATTTATGCTA GAAAAGTCCA TTTGATTTTC TTTTACTATG GCATGTTTTT      120
ATAGGTTCTG TCTTATTTTT ATTAAGTTCA TGTTTTTACT CTTTATTATC AGGAGTTCCT      180
ACCATATTTT ATTNGCAAGC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:666:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

```

GCCGATGAGG ACCAAGATNA AAACAGTGCT CAAAAGTCGT GGCCGCCAC CTACAGANCC      60
GCTGCCCCGAC GGGTGGATCA TGACATTCCA TAACTCTGGA GTCCCGGTGT ACCTACACAG      120

```

AGAGTCTCGG	GTGGTCACCT	GGTCCAGGCC	ATACTTCTTG	GGAACGGGAA	GCATACGGAA	180
ACACGACCCT	CCTCTGAGTA	GCATCCCTTG	TCTGCATTAT	AAGAAAATGA	AGGACAACGA	240
GGAACGGGAG	CAAAGCAGTG	ACCTCACCCC	TAGTGGGGAT	GTGTCCCCCG	TCAAGCCCCT	300
GAGCCGATCT	GCAGAGCTGG	AGTTTCCCCCT	GGATGAGCCT	GACTCTATGG	GTGCTGACCC	360
GGGGCCCCCG	GACGAGAAAG	ACCCACTAGG	GGCTGAGGCA	GGCCCTGGGG	CCCTGGGGCA	420
GGTGAAGGCC	AAAGTCGAGG	TGTGCAAAGA	TGAATCCGTT	GATCTCGAG		469

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

GAATTCGGCC	TTCATGGCCT	ACACATACAA	CAAACCGAAG	CTTTCGGAAC	CCGAAGAGGA	60
ACTTCTCCAG	CAATTTAAAC	GGGAGGAGGT	GTCCCCAACA	GGGAGTTTCA	GTGCCCACTA	120
CTTGTCGATG	TTTCTCTTAA	CTGCTGCCTG	CTTATTTTTC	CTAATACTGG	GACTGACTTA	180
CCTAGGAATG	AGAGGGACAG	GAGTATCTGA	GGATGGAGAA	CTCAGCATAG	AAAACCCCTT	240
TGGTGAAACA	TTTGGAAAAA	TACAAGAAAG	TGAAAAAACT	CTTATGATGA	ACACATTATA	300
TAAGCTTCAT	GATCGATTAA	CACAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

GAATTCGGCC	TTCATGGCCT	AGGACCCAAA	GTCCGCGTGG	AACCGCGATA	GGGATCTGTC	60
AGGGCCCCGG	GCCGGGTCCA	GCTTGGTGGT	TGCGGTAGTG	AGAGGCCTCC	GCTGGTTGCC	120
AGGCTTGGTC	TAGAGGTGGA	GCACAGTGAA	AGAATTCAAG	ATGCCACCTA	ATATAAACTG	180
GAAAGAAATA	ATGAAAGTTG	ACCCAGATGA	CCTGCCCCGT	CAAGAAGAAC	TGGCAGATAA	240
TTTATTGATT	TCCTTATCCA	AGGTGGAAGT	AAATGAGCTA	AAAAGTGAAA	AGCAAGAAAA	300
TGTGATACAC	CTTTTCAGAA	TACTCAGTC	ACTAATGAAG	ATGAAAGCTC	AAGAAGTGGA	360
GCTGGCTTTG	GAAGAAGTAG	AAAAAGCTGG	AGAAGAACAA	GCAAAATTTG	AAAATCAATT	420
AAAAACTAAA	GTAATGAAAC	TGGAAAATGA	ACTGGAGATG	GCGCACTCGA	G	471

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AGAGAGGTTG CTCATTCGTC AGAGCGTGCT GCCCACCCTC      60
CACCCCTGCA TGGCAGAAAC TGTGCAGGGG ACGAGGCCAA GGAATCAGGA GACCCAGAGG      120
CAGGGGTGGC CCGGAGACGG TGAAGAAACC AAGACGCAGA GAGGCCAAGC CCCTTGCCTT      180
GGGTACACA GCCAAAGGAG GCAGAGCCAG AACTCACAAC CAGATCCAGA GGCAACAGGG      240
ACATGGCCAC CTGGGACGAA AAGGCAGTCA CCCGCAGGGC CAAGGTGGCT CCCGCTGAGA      300
GGATGAGCAA GTTCTTAAGG CACTTCACGG TCGTGGGAGA CGACTACCAT GCCTGGAACA      360
TCAACTACAA GAAACGGGAG TATCTCGAG                                     389

```

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```

GAATTCGGCC TTCATGGCCT AGTGTACAAA AATATAGAAA GAAAAGAACA AACAAAAAAA      60
GAGACAAAGG TGGAAATACCT TTTTGAAATA AAAGAGAGCT AGCAATGCAG TACATGGTCC      120
TTGCCCTATT ACTATCCATC CTCATCCTAG CAATAATCCC CATCCTCCAT ATATCCATAC      180
AACAAAGCAT AATATTTTCGC CCACTCGAG                                     209

```

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```

GAGTTCATTC AAGATATTTT TCACTTGCTG TTCAGGAGCT TTGATGTGCG TCACCATTC      60
TGGCATGTTT ACGCTGTTCC TGTGCAGGTA TTTCAGGAAG ACGTCTGCAT TCCTCCGAGC      120
AAGGGTGCAA GCCTTCAGGA ATGCCTCCTT CTGCTCCAGG TGCTTGCTGA TCATGGGCGT      180
CACGTGGTCC GTCTCAGAGT TTGGGCCCAG CTTATCCGCC CCGCCACACC AGTCTTCTTC      240
TCTCTGTAC TCCCTGTTCC AGGCTCTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```

GAATTCGGCC TTCATGGCCT AAGATAAATT TGACAAAGTT AACTGAAATT TATCTGGTCC      60
ATTTTATTCA TGCTACTAAG ATGGGAATCT TTAACACAA GGGTCAGCAA GCTTTGGCCC      120
ATGGATTGGC CACCTGTAC GTAAATAAAG TTTCTTTGAA ACAAGCCTAC ACTCATTCAT      180
TTATGTTTTG TCTGTGGTTG CTTTCCACAA CTGCAGAGTT GTATGGCTTG CAAGTCTAAA      240

```

AACATTTACT	ATTTGGCCCT	CTAAGAAAAA	GTTAAGACAC	CTAGTCTAAT	GGCCTTTTGG	300
GAAAAAACAA	ATCACTAACT	CATAATCATT	TATATCCATT	ATTTTCTGCA	TAAATGTAAT	360
GCTATTGTAC	AGGTACTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:673:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 526 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GAATTCGGCC	TTCATGCCTA	CCAAATTTGT	CTAAGCACTG	GCCAGTCTGT	TGTGGGCATT	60
GTTTTCTACA	ACC.AATCTG	GGTTTTTTTC	TTCTTTCTTT	AAACATAGAG	GTACCACCAC	120
AAGGGATGCC	CTACTCTCTC	GCAGCTCTTG	AAAGCATCTG	TTTGAGGGAA	AGGTCTCTGG	180
GCAAGCAAGT	GGTTATTTGG	ATTGCTTGCT	TCCCTTTTTC	CACCTGGGAC	ATTGCAATCA	240
TAAAATAACA	GTAAATTCCA	AACCTCAAAA	ACTATTATGG	CCTGAGCACA	GCTGAAATCT	300
AGCAGAGTTT	AACCTCTCTG	CCTCCATGTC	TGTCACCTAT	AATTCAGGTT	CTGCTGTTGG	360
CTTCAGAACA	TGAGCAGAAG	AATCGTTTTA	TGCTAGTTAT	TGCATTCATG	GTTGAAACTC	420
AACCTAGGGA	AAGGGTTCCA	ATGTATTAAG	CAATGGGCTG	CTTCTCCCCA	ATCCTCCCTA	480
ACAATTTGTT	GTGTGGACTT	CTCATCTAAA	AGGTTAGTGA	CTCGAG		526

(2) INFORMATION FOR SEQ ID NO:674:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 131 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GAATTGCTTC	TCAATTTACC	CGAGATTTC	TTCGAGATTC	AGGTGTTGTC	TCACTTATTG	60
AAACCTTGCT	TAATTATCCA	TCCTCTAGAG	TTAGGACAAG	TTTTTTGGAA	AATATGATTC	120
ACTGGCTCGA	G					131

(2) INFORMATION FOR SEQ ID NO:675:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	TTCATGGCCT	ACCTAATCTT	CCTTTTCTTT	TTAGCATTTT	TGGGCTTTTC	60
AAAGCAATCT	CCCCAAAAA	AGAATCATTT	GGTTTTGGAA	AAGAAAACAG	AATCAGCAAC	120
TTTTCGGGTG	TGTGGTGAAA	ATGTCACGTG	TGTGGAATAC	GCTATCTCCT	GGCTACAAGA	180
CCTGATTGAA	AAAGAACAGT	GTCTTACAC	CAGTGAAGAT	GAGTGCATCA	AAGACTTTGA	240
TGAAAAGGAG	TATCAGGAGT	TGAATGAGCT	GCAGAAGAAG	TTAAATATTA	ACATTTCCCT	300

GGACCATAAG AGACCTTTGA TTAAGGTTTT GGAATTAAC AGAGGACTCG AG

352

(2) INFORMATION FOR SEQ ID NO:676:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAATTCGGCC TTCATGGCCT AAACCCATAA AACAGGAATT CTTATAATC CTAGAGGACA	60
AGGCATTATA GAATGGGCAC ATCAAACATT ACAACGAATG TTGAAAAGAC AAAAAGGGGG	120
TATAGGAGGC CAACTACCAC CTCAATCAAA ACTACATTTA GCCTTATTTA CTTTAAATTT	180
TTTGACTCCT GGTACGGATG GTAAGACTCC AGCAGAAAGA CATTGGCAAG TGTTAGAGGA	240
AAAGACTCGA G	251

(2) INFORMATION FOR SEQ ID NO:677:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

GGGCATTTCG AGTTTTCTTC CCTGCTGCAT GTAATGTCTC AGAATCAACA TTCTTTTAAA	60
ATCTAGACTA TATTTTGAGG CAATGAATTA CTTATATCA ACTTAGGCTT GTTTTGACAT	120
TCAGTAGAAC TTAAAGTTCA ATCTAAAGGC TTCAGTCCAC ATTTTTTTAT ACGTTGTATT	180
TTAAAAACGT TTGAAAGGAG TCTTACACCT GTATCATGAA AACTGAATCC TTTTGAAATA	240
CCACTATATG AAGAGAGAGA TGAAATTAG TGAACAGAAT TGAAAAGGTG CTCATAATT	300
CACTATGCAA ACTTACCCCA GTCAACTCGA G	331

(2) INFORMATION FOR SEQ ID NO:678:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

GAATTGAACA ATGCTGACAG GCTGGTANTC CTGCCCTGAA GCAACTCACA GACTCATAGT	60
TATAGAACAT CTTTATCTTT AGTTAATCCA TNGCACAGCA TTGGCCAAGG GTCAATACCT	120
TGTAATAAGC ATGTGTGTAT TGGTCAGGGT TCTACAGAGA GACAGATCAA TAGGAGCTAT	180
CGATAGATAT AGACATATGA GAGGGGGTTT GTTAGGGGAA TTAGCTCACT TGATTACAGA	240
GGTTGAGAAG TCGCTCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:679:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 336 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC	TTCATGGCCT	AGCAGCCCGA	GGCCTTGAGG	CCACTGCCTC	CCCAGGGCTC	60
CTGAAGCCAA	AGAATGGAAG	TGGTGAGCTG	AGCTACGGAG	AAGTGATGGG	TCCCTTGGAG	120
AAGCCTGGTG	GAAGGCACAA	ATGCCGCTTC	TGTGCCAAAG	TATTTGGCAG	TGACAGTGCC	180
CTGCAGATCC	ACCTTCGTTC	CCACACGGGT	GAGAGGCCCT	ATAAGTGCAA	TGTCTGTGGA	240
AACCGTTTTA	CCACCCGTGG	CAACCTCAAA	GTGCATTTC	ACCGGCATCG	TGAGAAGTAC	300
CCACATGTGC	AGATGAACCC	ACACCCAGTA	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GAATTCGGCC	TTCATGGCCT	AAATTAAAGA	TGATTTTTTT	AATGTGAATA	AAGTTATGTT	60
CTGATAGTTT	GTACAGAAAA	AATAAAATGG	ATGCCCATGT	TTTATTGCTA	TTACTAAATG	120
TCAAGATTGT	ATGCTATTAT	GTCTTGTAAG	TTTCTTTTGT	TGGTGTAAT	ATGGAAATGC	180
CACATTGGTT	AAGTGCCATC	ATTGTGAATG	CAATGTGTCA	CTTGAAAAGA	GATTGAAGA	240
AACTGACAAC	TTCAAAAACA	AATGAGAAGC	CCAAGGAACT	GTGAGCAATT	AAAAGCAAAC	300
CGCGACACCC	TTGTCTCCA	CCACACATAG	TGTACTTTGG	AAGCACAACG	TCCAGGCTGG	360
TACCGCAGCG	CCATGCCCCAT	TCCTCGCCG				389

(2) INFORMATION FOR SEQ ID NO:681:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GATTTCTCTG	TTGACTTCTG	CAGTGAACCA	CCTCAAAGCC	AATGTTAAGT	CAGCTGCAGA	60
CTTGATTAGC	CTGCCACCA	CTGTAGAGGG	ACTTCAGAAG	AGTGTAGCTT	CCATTGGCAA	120
TACTTTAAAC	AGCGTCCATC	TTGCTGTGGA	AGCACTACAG	AAAAGTGTGG	ATGAACACAA	180
GAAAACGATG	GAATTACTGC	AGAGTGATAT	GAATCAGCAC	TTCTTGAAGG	AGACTCCTGG	240
AAGCAACCAG	ATCATTCCGT	CACCTTCAGC	CACATCAGAA	CTTGACAATA	AAACCCACAG	300
TGAGAATTTG	AAACAGGATA	TCCTGTACCT	TCACAACCTCT	TTAGAGGAGG	TAAACAGTGC	360
CCTAGTGGGG	TACCAGAGAC	AGAATGATCT	TAAACTCGAG			400

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA.

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GGAGATCGAA AATTGAACT CTCAAAGAGA CAACAAATAG CATGGTAGAA TCAATTAAAC      60
ACTGCATTGT GTTGCTGCAG ATTGCCAAAA GTACTATTAA TCCCGTAGAT GCAATATATC      120
AACCTAGTCC TTTGGAACCT GTGATCAGCA CAATGCCTTC CCAGACTGTG TTACCTCCAG      180
AACCTGTTCA GTTGTGTAAG TCAGAGCAGC GTCCATCTTC CCTACCAGTT GGACCTGTGT      240
TGGCTACCTT GGGACATCAT CAGACTCCTA CACCAAATAG TACAGGCAGT GGCCATTACAC      300
CACAACCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GTGAGGGGTT CCGTGAAGTA GGTTCAGAGC TGCTGTTGAT GTGCTATACC TCCTTCAATT      60
CTCAGCTCTC AAAGGGGAAA ACAACTGCAG AGGATGGGAA ATGCTATACT GCCATGCCTG      120
GAAACACCCA CAGGAAAATT ACCAGTTTTG AGCTTGCTCA ACTGCAAGAA AAAGTGAAGG      180
AGACAGAAGC AGCCATGGAA AAATTAATCA ACAGAGTGGG ACCTAATGGT GAGAGAGCAC      240
AGACTGTGAC TTCTGACCAA GAGAAACGGT TGCTACATCA GCTCCGAGAA ATCACCAGAG      300
GTCTCGAG                                     308

```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GCTCCGGACA ATGAAACATA ACCAATACTA CCAATCAATA CTCATCATTA ATAATCATAA      60
TGGCTATAGC AATAAACTA GGAATGGCCC CCTTTCACCT CTGAGTCCCA GAGGTTACCC      120
AAGGCACCCC TCTGACATCC GGCCTGCTTC TTCTCACATG ACAAAAATA GCCCCATCT      180
CAATCATATA CCAAATCTCT CCCTCACTAA ACGTAAGCCT TCTCCTCACT CTCTCAATCT      240
TATCCATCAT AGCAGGCAGT TGAGGTGGAT TAAACCAAAC CCAGCTACGC AAAATCTTAG      300
CATACTCCTC AATTACCCAC ATAGGATGAA TAATAGCAGT TCTACCGTAC AACCTGACA      360
TAACCATTCT TAATTAACT ATTTATATTA TCCTAACTAC TACCGCATTC CTACTACTCA      420
ACTTAACTC CAGCACCACG GGCTCGAG                                     448

```

(2) INFORMATION FOR SEQ ID NO:685:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GTTGACAAAC AAGCTCAAGC TCGGATAAA ATGAAGGAGC AGGAAGACCT GGCCAAGGTG      60
GTATCTAAAG AAGAATCAAT TGTTTCATCA TTACGATTAG CCTATAAGGA TCTTGAAATT      120
CAAATGAAGA AAGACGAAAA GATGAACATT AGTGGCAAAA AAAATGTTGA CTCAGACAGA      180
CTCGGCATGG GATTTGGAAA TTGCAGAAGT GTTATTTTAC ATTCAAGTGAC TTCAGATATG      240
CAGACCATAG AGCAGGAATC ACCCATTATG GCAAAACCAA GAAAAAGTA TAATGATGAC      300
AGTGAACCTG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:686:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GTAATGGCAC AATGGATTCA AATGGGACAT TTGTTAATGT AACAAAGAGC ACATTTAACT      60
GGAAGGATTA CATTGGAGAT GACAGTCACT TTTATGTTTT GGATGGGCAA AAAGACCCTT      120
TACTCTGTGG AAATGGCTCA GATGCAGGCC AGTGTCCAGA AGGATACATC TGTGTGAAGG      180
CTGGTCGAAA CCCCAACTAT GGCTACACAA GCTTTGACAC CTTTAGCTGG GCTTTCCTGT      240
CTCTATTTTC ACTCATTCTT CGAG                                     264

```

(2) INFORMATION FOR SEQ ID NO:687:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GGGAACAGCA GTTCCTATGG CTTTTTTTTT TTTTTTCTG TGTATGAGCA ATTCGACTCA      60
GTGGGATGAT ATTTTCTTTT ATAACCTATT AATGTTTGCG ATACCGTGTA CTCAAATATT      120
CAATGTCAGC TGTCAGCTAC CATTGGGATC CATCCACAG ACCATCAAAA TGTACTTTTG      180
GGCTGAATTA GTCCTATGCC AAGACTTGTC GGTGGATCCA GCAGCAGTTG GGAACCACGT      240
GCCAGGCCTG GTGTATGTGC TCACGAACAC ACTCGAG                                     277

```

(2) INFORMATION FOR SEQ ID NO:688:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

GAATTCGGCC	TTCATGGCCT	AAATAGTTTA	GTTCTCTGGT	GCAATTGAA	GTATATCTTA	60
TAGTCACTTT	TAGTAATGTG	TGTTACTTCC	CTGTAAGGAA	TAGCAATGTT	ATACTTCTCC	120
TTTTCAGTG	AAGAAATTGA	GATGTAGAAA	GGAAGAGACC	TGCCCAAGGT	CAAAGAGCAA	180
GGCAGTGGA	AGCCTGAGAT	TAGACTTGTG	GTCTTTTAGA	TTTTTCATCT	GTTGTTCACC	240
ACTGAGGAGC	CAGCTTTCTG	TTTGCTGGAG	ACAGTTCAGC	CTAATGGAAT	TTTCTCTGCC	300
AGATGTCCAC	ATTGTGTTAG	GTGATGATTC	TAACCATCCT	CTAATACCCA	TTCTCCTCCA	360
AAGTGGCCCT	TTAGTTCCCC	ACCAGAACTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

GAATTCGGCC	TTCATGGCCT	ACTGTTCTGC	TCCTCCCAGA	CAGAGCCTTT	CCCTCAGCCC	60
AGGGGGTCAG	GGGGTGAGGG	AAAGGCTCTG	TCTGGGAGGA	GCAGAACAGC	AGAAGAGAGG	120
AGGAGGCAGG	GAGTTACAGG	AACCTGGGGT	ACCAGGCTGC	TGGGAAGATG	CAGATTATGA	180
CAGAGCTTGC	ACGATGCTGG	CACCCCATGC	CAACCACTCT	ACGTGGCTTT	CCTCTTCGGA	240
GAGGTGGTGG	GCTCCCTTCT	TCACTGTGCC	CTCCCTCCTC	TGGCCACTAG	GGGTGGGAAA	300
TACGAGTGAG	AATCCTTCCA	GATTTACTTC	CGCCAATCCA	GAGGTACAGG	CTTTTAGGCA	360
AGGGGCAGAG	AACTGCCCAA	TTTGCTGCTT	CATGGCCTAG	GGGTGGGGTT	CCTTAGGAGC	420
TGAAAAGTTG	AACAAGGTGT	GTGAGCAGGT	GGCTTGTTCC	TTGGTTTCAA	GCTCGAG	477

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

GAATTCGGCC	ATCATGGGCT	AAGACGTGGT	ANTGACATGC	CTGTAGACCC	AAGTATTTGG	60
GAGGCTGAGG	TGAGAGGTTT	GCTTGAGCCC	TGGAAGTCGA	GGCTTCAGTG	AGGCAAGATC	120
ACACCACTGC	ACTCCAGCCT	GGGAGAGCAA	GACCCTGTCT	CCAAAACCAA	AAAAAAGGG	180
AAAAAAGTAA	ATGTTATAGA	TACTTGCTAA	GGGCTTTGTA	TATACTTATT	ATTGTTATTT	240
CTCAGCACGT	ATGTAGCAGA	TGAGGAAATG	AAGGCTAAAG	GTCATATATN	TACAAAGTGG	300
GGAGGTCAGA	CTTTGAACCC	ACAACCTGAC	TGTGGAGCCA	CTTCAGTATA	CTCTCTCCCC	360
ATAAGAAAGT	TCCAATAGAA	AAAAAATGCT	ACTTAAGTAG	GGAAATCACA	AAATAAGTGC	420
CAATGAACAA	TAAATGTTCA	ACCTCACTAC	AGTTAAATG	TATATTAAAG	CAAGAGTTGA	480
GATGACACTT	TTCTTATAA	AACAGACAGG	GATTCAGGGA	CATTGGGACT	CTAATGCTGC	540
TGGTAAGACA	TGAATAAATA	CATACCATCT	CTGGCAATCA	ATACCAGAAG	ATCTCGAG	598

(2) INFORMATION FOR SEQ ID NO:691:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 406 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```
GAATTCGGCC TTCATGGCCT AGTTCTCCCT TCCATTCTGC CTTGTATCT TTGCAGTCAT    60
TGTATACAGC AGATTCTAGA AAGTGTTAAT CATTGTCACC TAAATGGCAT AGTTCACAGG    120
GACCTGAAGG TCAGTATATG GAGTCCATAA ATCTGAATCA AAGCAGTTTT ATTTTTTTTT    180
CTGGGGAAAG GGCAGAGGGT GGGTATTTAA AATGGTTCCC TTGCCTTTCC CAACTTGTTT    240
CTAAATGAG TAAATGATGA AATGATAATG CATGATGCCT CTTCCAGTTT GCTCATCTAC    300
AGGCTAAATA TACATCATAG CAAAAGGGA AGAATACTAA AGAATACAAC CTGCTAAGTT    360
TCCAAGCAGT AAACCTACCTA CAAAAGGGA TTGAGGATCC CTCGAG                    406
```

(2) INFORMATION FOR SEQ ID NO:692:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```
GTCCTGGAAG AATGTGTCCA GCAACCCAAA AACTAATAGA AGAGTCACAG AGAAAAATGA    60
ACGCTTTTATT TGAAGGTAGA CGCATCGAAT TTGCAGAACA AATAAATAAA ATGGAGGCTA    120
GGCCTAGAAG ACAATCAATG AAGGAAAAAG AGCATCAGGT GGTGCGTAAT GAAGAACAGA    180
AGGCGGAACA AGAAGAGGGT AAGGTGGCTC AGCGAGAGGA AGAGTTGAG GAGACAGGTA    240
ATCAGCACAA TGATAGACTC GAG                                         263
```

(2) INFORMATION FOR SEQ ID NO:693:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 404 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GCCGCCGAAG AAGCATCGTT AAAGTCTCTC TTCACCCTGC CGTCATGTCT AAGTCAGAGT    60
CTCCTAAAGA GCCCGAACAG CTGAGGAAGC TCTTCATTGG AGGGTTGAGC TTGAAACAA    120
CTGATGAGAG CCTGAGGAGC CATTTTGAGC AATGGGGAAC GTCACGGAC TGTGTGGTAA    180
TGAGAGATCC AAACACCAAG CGTCCAGGG GCTTTGGGTT TGTACATAT GCCACTGTGG    240
AGGAGGTGGA TGCAGCTATG AATGCAAGGC CACACAAGGT GGATGGAAGA GTTGTGGAAC    300
CAAAGAGAGC TGTCTCCAGA GAAGATTCTC AAAGACCAGG TGCCCACTTA ACTGTGAAAA    360
AGATATTTGT TGGTGGCATT AAAGAAGACA CTGAAGTCCT CGAG                    404
```

(2) INFORMATION FOR SEQ ID NO:694:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

GAATTCGGCC TTTCATGGCC TACTGGATGG CTTTTTATCT TTTGCTTTTC TTTTATGGCA	60
GATGCCTTTC CATCGGCATC CCAGCTGTGG CTGGGACGT TTTGGGAAGT GTGTTTGCT	120
CACTCCGAGA GAACGAGGTC TCAAGAGGAA GTGTGTCTGG CTTGCAAAGA TGTCCTTGGG	180
CCTGGACAGG ACCCCGCTGT GTTCTGCAGC CCTCGACGCA GTGGGTGAGT GAGGCCTTCC	240
TCTCCTGCTG GCTGCCCTGG AGGATTTCAG CATGTCCCAG GATTTGCTCC ACCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:695:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 468 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

GAATTCGGCC TTTCATGGCCT ACCTGTTGAA AACTCTCCAA TGACTTCCCA CTCCATCATC	60
CTGTGGGATG GGTCCACCAT GCTGGACCAC AAGGCTCTGC ACAATGCGGC TCCCACCAGC	120
CTCTCCCCTT GGCCAGATT GCTTCCTCCT ACCCCTTCT CTAGCTGCCA GGCCCCCAA	180
CCCCCGCATG GAGCCCTTCA GCAGCTCTGT GAGCTCCCTG CCTGTTGGCA GCCATCACAG	240
CAACGGGCTC TGGTGTGCCC CTTGTATCC CTGTATTCAG GCCATTATCT GTAATGACAG	300
CCTGGCATAA TTTTATTTTC ACAATTGTGA TAATTATATT CTATTGAGCT AAATGATCAT	360
TATAATCATT ATTAAATATT TATTAAGCAC TTCTAGCTGT GCAAACATAA TAAGATGTGG	420
CCTCAGCTCT TAAAACTTT CTTCTAATT CCAACCCAA TACTCGAG	468

(2) INFORMATION FOR SEQ ID NO:696:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

GAATTCGGCC TTTCATGGCCT ACAAGGGAAC ATGTAACTA ACATAACCAA TTGTCAGTTC	60
TCCATGTATT CCTCAAAGA ATGTCAGAGT AAATGTATTA GAAATACAGT ATCCAGACTG	120
CTAGTCCTTG CCAGAGACAT TCTTACCTCT GCCCTGTGAT AATATTTTAT GCTTGACAGT	180
GAAAACAAGT GTGGCCCTT GCACCGGTTA GCTAGAAGTA CAGCCAGATT TCAAGCTAGT	240
GCAGTCACCT CTTCCGTCAT TCTTCACAA TCTTGTC AAC CTGGATCTTA GACTTCATCT	300
GAACCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:697:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 464 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

```
GAATTCGGCC TTCATGGCCT ACACGGATCC GTGTGAAGAC CTACACAGAT GAGCTGACGC      60
CCATTGAGTC TGCTGTCTCT GTGTTCAAGG CAGCCAACCTG GTATGAAAGG GAGATCTGGG      120
ACATGTTTGG AGTCTTCTTT GCTAACCACC CTGATCTAAG AAGGATCCTG ACAGATTATG      180
GCTTCGAGGG ACATCCTTTC CGGAAAGACT TTCCTCTATC TGGCTATGTT GAGTTACGTT      240
ATGATGATGA AGTGAAGCGG GTGGTGGCAG AGCCGGTGGA GTTGGCCCAA GAGTTCCGCA      300
AATTTGACCT GAACAGCCCC TGGGAGGCTT TCCAGTCTA TCGCCAACCC CCGGAGAGTC      360
TCAAGCTTGA AGCCGGAGAC AAGAAGCCTG ATGCCAAGTA GCTCCAGGGA ACGCATGTGG      420
ATCCTAGACA GCGCCTTATC TATGATTGAG TGCCATTCT CGAG                        464
```

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

```
GAATTCGGCC TTCATGGCCT ACGGTGGTGA ACGAGTCTCC AGCACCATGT CTGGTTTGTG      60
TGGCCCAACA GCCCGGCGCG GCCCTTTTCC GTTAGCGTTG CTGCTTTTGT TCCTGCTCGG      120
CCCCAGATTG GTCCTTGCCA TCTCCTTCCA TCTGCCATT AACTCTCGCA AGTGCCTCCG      180
TGAGGAGATT CACAAGGACC TGCTAGTGAC TGGCGCGTAC GAGATCTCCG ACCAGTCTGG      240
GGGCGCTGGC GGCCTGCGCA GCCACCTCAA GATCACAGAT TCTGCTGGCC ATATTCTCTA      300
CTCCAAAGAG GATGCAACCA AGGGGAAATT TGCCTTACC ACTGAAGATT ATGACATGTT      360
TGAAGTGTGT TTTGAGAGCA AGGGAACAGG GCGGATACCT GACCAACTCG AG              412
```

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

```
CAGCTCCTGT GACATTTGAA GTTTCTTTTA AAGGGGTTTT TCTTAATCAA AGTTTTACAT      60
TTGGTAGCAT AAGTAGTTCT TTATGCTTCA CAGGACATTG TCTTCAGAGT AATCTCTCTG      120
CTAAAATGGT ACATGTGGG                                          139
```

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 406 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC	TTCATGGCCT	ATGAAATGAT	ACCTATGGAG	TGTGATTCAT	TTTGCAGTGA	60
CCAAAATGAA	TCTGAAGTTG	AACCATCTGT	AAATGCTGAT	CTTAAACAAA	TGAATGAAAA	120
TTCTGTGACA	CACTGTTCTG	AAAATAATAT	GCCGTCTTCT	GATCTTGCGG	ATGAAAAGGT	180
TGAAACTGTT	TCTCAACCAT	CTGAAAGCCC	AAAAGATACC	ATAGATAAAA	CCAAAAGGCC	240
TCTACTCGA	AGATCTAGAT	TTCATTCTCC	ATCTACAAC	TGGTCACCCA	ACAAAGACAC	300
TCCACAAGAA	AAGAAGCGGC	CCCAGTCTCC	ATCTCCAGA	AGAGAAACTG	GGAAAGAAAG	360
CAGGAAGTCT	CAATCACCAT	CTCCTAAGAA	TGAGTCAAAC	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GGCAAGATGG	TGTTGCAGAC	CCAGGTCTTC	ATTTCTCTGT	TGCTCTGGAT	CTCTGGTGCC	60
TACGGGGACA	TCGTGATGAC	CCAGTCTCCA	NACTCCCTGG	CTGTGTCTCT	GGGCGAGAGG	120
GCCACCATCA	ACTGCAAGTC	CAGCCAGAGT	GTTTTGTACA	GCTCCAACAA	TAAGAACTAC	180
TTAGCTTGGT	ACCAGCAGAA	ACCAGGACAG	CCTCCTAAAC	TGCTCATTTA	CTGGGCATCT	240
ACCCGGGAGT	CCGGGGTCCC	TGACCGATTG	AGTGGCAGCG	GGTCTGGGAC	AGATTTCACT	300
CTTCACCATC	AGCAGCCTGC	AGGCTGAAGA	TGTGGCAGTT	TATTACTGTC	AGCAGTATTA	360
TAGTAGTTGG	ACGTTCTGGC	AAGGGACCAA	GGTGGAAATC	AAACGAACTG	TGGCTGCACC	420
ATCTGTCTTC	ATCTTCCCGC	CATCTGATGA	GCAGTTGAAA	TCTGGAACTG	CCTCTGTTGT	480
GTGCCTGCTG	AATAACTCCT	ATCCGCTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCGGCC	TTCATGGCCT	AGGGATGGTC	TTAACAGGGA	ANAGAGAGGG	TGGGGGAGAA	60
AATGTTTTTT	TCTAAGATTT	TCCACAGATG	CTATAGTACT	ATTGACAAAC	TGGGTTAGAG	120
AAGGAGTGTA	CCGCTGTGCT	GTTGGCACGA	ACACCTTCAG	GGACTGGAGC	TGCTTTTATC	180
CTTGGAAGAG	TATTCCAGT	TGAAGCTGAA	AAGTACAGCA	CAGTGCAGCT	TTGGTTTATA	240
TTCACTCATC	TCAGGAGAAC	TTCAAGAGAG	CTTGAGTAGG	CCAAATGTTG	AAGTTAAGTT	300
TTCCAATAAT	GTGACTTCTT	AAAAGTTTAA	TTAAAGGGGA	GGGGCAAATA	TTGGCAATTA	360
GTTGGCAGTG	GCCTGTTACG	GTTGGGATTG	GTGGGGTGGG	TTTAGGTAAT	TGTTTAGTTT	420
ATGATTGCAG	ATAAACTCAT	GCCAGATATT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:703:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 439 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```
GAATTCGGCC TTCATGGCCT AGTCCTTTCG TCTACTGTTG AATGGAGGAG GATTTTTTTT    60
TTTTTCCTC NACACAGGGG TTTTCTTGA GCTCAAGTTT GGATGACCCC AGACAGTAAG    120
ATAATCTCAT CATGGTAAAG TTAATATGAA ATATGTGGTC TCCAAACAGC CTCTCCCAGA    180
GGCCAGGATC AGCAGGTTTG AGTGGATAAT TGGCTTGTGG TCATTTTCTC ATAGGATTTT    240
TCTTTTAGTA GTGGAACTG TTTTTCAAAT CAAATTTGGA TGCCAACATAT GTGGAACAGA    300
AGTGTGGCTG CTCTGGTGA AGTGGCAATG GTAGTCCTAG AGTCTCCCTG TCAGCCACAC    360
CCTTTGTCTC CCCCTACCCA AGGGACCCCTG TGGCCTGGAA CCGCAGTGTG AAATGCTATA    420
TAGTGCAATG AAGCTCGAG                                     439
```

(2) INFORMATION FOR SEQ ID NO:704:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 437 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```
GAATTCGGCC TTCATGGCCA ACAGCTGAGA TAACGAGGAA ATATTCTGAA ATGGATCCCA    60
AATATTTCAT CTTAATTTTG TTTTGTGGAC ACCTGAACAA TACATTTTTT TCAAAGACAG    120
AGACAATTAC AACAGAGAAG CAGTCACAGC CTACCTTATT CACATCATCA ATGTCACAGG    180
TATTGGCTAA TTCTCAAAAC ACAACAGGGA ATCCTTTGGG TCAACCAACA CAATTGAGCG    240
ACACTTTTTC TGGACAATCA ATATCACCTG CCAAAGTCAC TGCTGGACAA CCAACACCAG    300
CTGTCTATAC CTCTTCTGAA AAACCAGAAG CACATACTTC TGCTGGACAA CCACTTGCCT    360
ACAACACCAA ACAACCAACA CCAATAGCCA ACACCTCCTC CCAGCAAGCC GTGTTACCT    420
CTGCCAGACT ACTCGAG                                     437
```

(2) INFORMATION FOR SEQ ID NO:705:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 403 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```
GAATTCGGCC TTCATGGCCT ACATTCACAT GTTCCCAATC ACTTCCCTCA CACACATATG    60
CTCACTGATT TACACAGCCA TTCGCACTTA TACATACTCG NTCACATTCA CACAGGGTCA    120
CCCATTACAC CACTCTGAC ACATTTACCC TCACATTAC CCACTCACCA TCCCCACTCA    180
CCAGTTCACA TGCACTCACC CAAGCTCACA CTTGACCACG GACACACCCT CAAACATAGG    240
TGCTTACACA CAAGCCNACA CACTCTCACC TAGCCATTCA TACTCACGTG CACCTATACC    300
TTCACACACA TCCTCACATA CCCACACAGC TCTACACATA CCCACTTCT TACACATTCA    360
CACACATACC TATAGACACA TTCAAACACA CCCNACGCTC GAG                                     403
```

(2) INFORMATION FOR SEQ ID NO:706:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 501 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC TTCATGGCCT ACTCAGAATC ATAATGAAGT CCAGTCTACC ACACCACCCT      60
TCACTACTGT TGATTCACAG AAAGACTGTA GAAAATTTCC AGTTCACAG AAGGATGGTA      120
GTGCTTTGGA GGATTCTAGC ACTTCAGGGG CATCCTGTTC CAAGTCAAGA CCACATTTAG      180
CTGGGACACA TACTTCTCTT AGACTTCCGC AGGAAGGAAA AGGAACCTGT ATTCTTGTAG      240
GTGGTCATGA AATCACTTCT GGATTAGAAG TAATTTCTTC CCTAAGAGCA ATTCATGGGT      300
TGCAAGTAGA AGTTTGTCTT CTTAATGGCT GTGATTACAT CGTGAGTAAT CGCATGGTGG      360
TGGAAGGAG GTCTCAATCT GAGATGTTAA ATAGTGTCAA TAAGAACAAG TTCATTGAGC      420
AGATCCAGCA CCTGCAGAGT ATGTTTGAAA GAATATGTGT GATTGTGGAA AAGGACAGAG      480
AAAAACAGG CGAAACTCGA G                                     501

```

(2) INFORMATION FOR SEQ ID NO:707:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT AGGACAACCTG TGATATTTCA GTTCCTGATT GTAAATACCT      60
CCTAAGCCTG AAGCTTCTGT TACTAGCCAT TGTGAGCTTC AGTTTCTTCA TCTGCAAAAT      120
GGGCATAATA CAATCTATTC TTGCCACATC AAGGGATTGT TATTCCTTTA AAAAAAACC      180
AATACCAAAG AAGCCTACAA TGTTGGCCTT AGCCAAAATT CTGTTGATTT CAACGTTGTT      240
TTATTCACCT CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATACACA CAACACAGAA      300
CATTGCAGAA GTTTTAAANA CAATGGAAAA TAAACCTATT TCTTTGGAAA GTGAAGCAA      360
CTTAACTCA GATAAAGNAA ATATAACCAC CTCAATCTC GAG                                     403

```

(2) INFORMATION FOR SEQ ID NO:708:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT AGGTGGGGGG CTTCTGCAC AAAAAGGGAG TAAGTCCACG      60
CTATACCTGT GCTCAAATAA CAGCGCCATT GATGTCTTGG CANACTTGGG ANGACATTCC      120
TTCTGCAAGA CTTGNTGAGC ATATTTCTGA GCTCTCTTTA CATGGTCAGG GTCCACATAA      180
TGCATTTTTT TCATGTCACA TTCTTCAGTA GTATAATTTA ACTTGAGGAT ATAAAGGATC      240
CACACTCCAA ACACAAGCAA TGTACATTG AGGATGTCTT TTAATNACAA GCTGGGCCTT      300

```

CTCATCTTGC TTTGAGCTCG GGTGTACCAT TGCAGGGAGG GCCTCGAG

348

(2) INFORMATION FOR SEQ ID NO:709:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 322 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GAATTCGGCC TTCATGGCCT ACAGAATTGG CAGCACAAAG AAAACGCCCT CTCCTGACTT      60
GTATTGTGGC AGTCTGAACG CCCCCAGAAA ATTGTGCCAA AGAGTTTAGA AAAATAAATA      120
TACAATAAAA GTAAACACAT ACACACAAAA CAGCAAACTT CAGGTAAC TAATTTGGATTG      180
CAAACAGGAT AATTAAATGT TCAAACAATC TGATAAAATA ACCATTTGGA AACTGCTTGG      240
CCTTCTGTTT TTTTATTTGA TTGACTACAA TGCGGTATTG GTCTCTTGCT GCACTTCAAA      300
AGCAACCAAC AAAACCCTCG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:710:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGCCATAGAA ACTGCCTCTT TTCATGTGGG ATGAAGACAT      60
CTGTGCCAAG AGTGGCATGA AGACATTTGC AAGTTCTTGT ATCCTGAAGA GAGTAAAGTT      120
CAGTTTGGAT GGCAGCAAGA TGAAATCAGC TATTACACCT GCTGTACACA CACTTCCTCA      180
TCACTGCAGC CATTGTGAAA TTGACAACAT GCGGTAATT TAAGTGTGA AGTCCCTAAC      240
CCCNAAACCC TCTAAAAGGT GGATTCCTCT AGTTGGTTTG TAATTGTTCT TTGAAGGCTG      300
TTTATGACTA GAATTTTATA TTTGTTATCT TTGTTAAGGA AAATAGAGGA ANNCAAAGGG      360
ACTCGAG                                     367

```

(2) INFORMATION FOR SEQ ID NO:711:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 318 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

```

GAATTCGGCC TTCATGGCCT AGACTTCCAC AGAGACCTAT CTGGAAGTCC TGGTTCCTTA      60
CCTCTGCTTC TGTCAGAGCA GCTCTGGGTT TTGGTTTGTT ACTATTGTAC ATATTAGGCT      120
TCTATAACAAG AAGAACTGGT CCCATTGGTT TAAAAATAAG TTGAAAATC CTAGAAACAG      180
TGAGAGTCAG AAAAAAAAC TGTTTTTATA TACATATTCT CTCCCCCACC CCCTTCTCT      240
CCAGTTGAAA TATGTTGCAG AGCTCTAAAT TTAGGGATGC TTTTGGCGTA TTTCTTATAC      300
ACTCCAGAGG CACTCGAG                                     318

```


(2) INFORMATION FOR SEQ ID NO:712:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 468 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

```
GAATTCGGCC AAAGANGCCT AGGTTTGAAA ACTCTGCTTC CTTGTGAAT TTGGTGTAG      60
GAGTTCTTAT TGTATTCTG CAGCCTTTAC TATTGTCCTT TATTTACTGA ACACAGTGAA      120
TACCAAGCAC TGTTTATTAG AGGTTAGGAG TAGGGGCAGG TGATTAAAAA AACAAAAAAG      180
CTAATAATCT CCTCAAGCAA TTTCTGGCCT AATAGAATTA TAGTAGACAG TGAAGTATCT      240
AAACCCAGGG AATCAGATTG AGGCACCATG TCCATCGCCT TGAGAATTAA TAGGCTGCAT      300
TTCTGGGTTC TCCNTTTTTT TTTTTTTTTT GCCCAACTGA GTCTTTCTGT GGACTTACAT      360
GGAAGTTCTT ATTCTCTTAA ATCATTAAAG TACTTGACAA TATTCTTGA TTTGGAGAAA      420
CTGGATGTAG GGCCGTATGA AAAAATCATT CGAAATCAGA ATCTCGAG      468
```

(2) INFORMATION FOR SEQ ID NO:713:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

```
GAATTCGGCC AAAGAGGCCT ATTTTATTGC CAACTTCTG AATAAACTGA AACAGCAGCA      60
ACAGCAGCAA CAACAGCATT CTGAAAATAA GAGAGAAAAC TCTGAAGATC CCGAGGAATC      120
TTGGGAAAAT TTAGTTTCGG ATGAGGATTT TTCTGCACTG TCCTTGGAAT CAGCAAATGT      180
GGAAGATTG GAACCTGTTA GAACTCTT TAGAAAGTTG CAAAGCACAC CTAAGTATCA      240
GAACTTCTA AAGGAAAGAC AACAGTACC TGTATTTAAA CATCGGTCC TCTCGAG      297
```

(2) INFORMATION FOR SEQ ID NO:714:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```
GAATTCGGCC AAAGAGGCCT AGAAATACTG GGAAAAAGGA CACTTACTGT GTGACTTAAA      60
TTGATTAAAG GGTTATTCAG TTCAACTCTC TTGAATCTAA TTAGTATTTT TGTGTCATTT      120
ATTATTATAG GGCACACATT TTTTACATTT GATTTAACTT GACCAAAATT AAATGAGCAA      180
ATGTTTATTG CTATGTCCAT TGTTTTCTT TCTCTGTCAC TGTTAAAAAG AGGAGCCATG      240
GCTTCTGCTT CTTCTGTGTA TTCTCCATTA GACCTTCTTC ATCCACCCTC TTCCCCATCC      300
CTTTCAGCTC TGAAGGGTCC TCTCGAG      327
```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

GAATTCGGCC AAAGAGGCCT ACTTCTCCAA GCATTCATGT ACATCCTTGG GATCTGCCTC	60
ATCATGGAGC TCATTGGTGG CGTGGTGGCC TTGACCTTCC GGAACCAGAC CATTGACTTC	120
CTGAACGACA ACATTCGAAG AGGAATTGAG AACTACTATG ATGATCTGGA CTTCAAAAAC	180
ATCATGGACT TTGTTTCAGAA AAAGTTCAAG TGCTGTGGCG GGGAGGACTA CCGAGATTGG	240
AGCAAGAATC AGTACCACGA CTGCAGTGCC CCTGGACCCC TGGCCTGTGG GGTGCCCTAC	300
ACCTGCTGCA TCAGGAATCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

GAATTCGGCC AAAGAGGCCT AAAGGGATTT AAAACCTCTG TAGAGGCTGG GCGCGGTGGC	60
TCACACCTGT AATCCCAGCA CTTTGGGAGG CCAGGGCGGG CAGATCACCT GAGGTCGGGA	120
GTTTCGAGACC AGCCTGACCA ACGTGGAGAA ACCATGTNTC TCTACTAAAA ATACAAAATT	180
AGCCAGGCGT GGTGGCACAT GCCTGTAATC CCAGCTACTC GGGAGGCTGA GGCAGGAGAA	240
TCACTTGAAC CTGGGANGTG GAGGTTTTGG TGAGCTGAGA TCGTGCCATT GCACTCCAGC	300
CTGGGCAACA AGAGTGANAC TCCATCTCNA AAAAAAAAAA AGAAGAGTTT ACACGAAGTC	360
ACCTCTATTT CAGAAGATAA TCTAGACTCT ATTCCCTCAG AGTCTTTTTT CTCCCCAAG	420
ATAACACTGT CCTAGGTATT TCCTCATACC CCCAGGCCCA CAGTTCATGG CCCACATGTC	480
CCCTGTAAGC TCGAG	495

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC AAAGAGGCCT ATTTTTTAGA TCATCAGCTA TGTTAGTGT TTGTGTATGT	60
TATGTGTGGC TCAAGACAAC TTTGCTTCTT TTAATATAGG CAGGGAAGTC AAAAGATTGG	120
ATATCCCTGC TTTATACCAA GAAAGACAAC ACCCCACATT TGCAGTGCCT GAAAACACTA	180
CCAGCCATCT GAAAAACATG TGAATTCTAA CTTCTGTTCT TTTTGTAGC AGTGGAATCC	240
CACGGTGATA TCTGAGGGAT GTGGTTACCT TTTGGAGGAG GTTGACGGTT TCTAAGGATG	300
ATTCTTTCTG AGTGAAATAT TGTCAGTGTC ATTGACCTTT TCATTATTTC AACTATTATT	360
ATTCCAGGTT ATCAATACTC TGGCTGACCA TCATCATCGG GGGACTGACT CGAG	414

(2) INFORMATION FOR SEQ ID NO:718:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

```

GAATTCGGCC AAAGAGGCCT AGGATGAGAA TGA CTGTGCC TCATTGCATC TTCCTGGCTG      60
CCTGATGGGC AGAAAACCTG GGTCTCCTCC CCATTTTAGG AATGGGAAGG CTGAGTCTCT      120
GCGATGAGCC TTCCTCAGGG ATGGTGAGGG GCCGGCCCGG CACTAAGCCC CATTCTCTGA      180
GTTAGGACCT GTAGGAGGGT GGCAGGGGCA AGCGGGGCAG GTGGGTGGCC CAGGCAACTT      240
TGCAAACATC TTCCCTTTT CCGGAGAAG CAAACGCGCT GTGTGAAAG GCACATTCCG      300
AAGATGGAGT TTCACATCAG CAAGTGCAGG TGGCTCGTGG ATGTTGCAGG GTGGGGTGGG      360
GCAGTGCCAG CTTGCTGGGC CTCAGCTAGG TTAGCAGGAG CTGGGGAGGT GCCCTCGAAG      420
CAGGGATCAG GGCCTCTGGG TATGCTGCAG GCTCGAG                                457

```

(2) INFORMATION FOR SEQ ID NO:719:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 509 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

```

GAATTCGGCC AAAGAGGCCT AACTTGACAG AGCTGTTTTA TGCAGAGATA AATTGGAAGA      60
ATGCTCAGCC TCTTAAGCTA GCTTATTCGA AGAGGTACTG GAAAAAATAT GGCAAAGACT      120
TCAACGACAT ATGCCAAAAC TTTTCCCTT GGAAATCATT GACTAGCATC ACTGAATGTT      180
ATTCTTTGTG GAGAACTACT GACAGATATG TGCAACAGAA ATGGTTAAAA GCAGCAGAAA      240
CTGAGAGTAA GCTGAAACAA GTATATATCC CAATTTACAG GAAACCAAAT CCCAACCAAA      300
TATCTACCAG CAATGGCAAG CCTGGTGCTA TGAGTGAAAC CATGAGGTTG ACATTCCTGC      360
CTCAGAATCC CCTTGTAAGT CAAGCCTGGG AGGGCTGCTG TGCTACACAG TCTAACCAGT      420
AGTATTCTTG GGGCCACCT AATATGCAGT GCAATTTGTT GGCTTTATTG AGAAAAATAT      480
GGAGACCTGA AAATGCCAC CCGCTCGAG                                509

```

(2) INFORMATION FOR SEQ ID NO:720:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

GAATTCGGCC AAAGAGGCCT AATGTGTAGT CATCTGGGAT ATGCTAGCAT CACAGTTACC      60
TGGAGTCATC TTGAATATGG AGATGACAGG GACTGATTTT GCAGATTTCG TGAGTTGGTG      120
GGATATGTAA ATATGTTTTT CACCAACAAA TCAGATATTT CTGTTGGGCA GCCAAGTGTA      180
ATAACCATG CTGTAAATGA TCTCTGTCCT CTCCAAATCA CATGATTAAT TAAATTATGT      240

```

GAATGCCTAG TTGACTGCTA GGGAATGCTT GTACTTTGGA AATATTTTAA CCAAGGACAC 300
TCTAGAAATT CTCTTGCTCT CCCACCTCAA CAGTGCAACT CGAG 344

(2) INFORMATION FOR SEQ ID NO:721:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

CGGTAGAGAG GCAGAAGCAA GAGAGCTACG GTTCAGGTTG GGCACCACTG ATGCCACTGG 60
 TTCTCTGCAA GGCGATTCCA TGACAGAAAC CGTAGCAGAA AACATCGTTA CCAGTATCCT 120
 GAAGCAGTTC ACTCAGTCTC CAGAGACAGA AGGCATCTGC TGATTCTTTT CCAGACACAA 180
 AAGTCACTTA CGTGGACAGG AAAGAGCTTC CTGGGGAAAAG GAAAACAAAG ACTGAAATAG 240
 TTGTGGAGTC TAAACTGACT GAGGATGTTG ATGTTTCCGA TGAAGCTGGC CTGGACTACC 300
 TTTTAAGCAA GGATAATAAG GAAGTTGGAC TCGAG 335

(2) INFORMATION FOR SEQ ID NO:722:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

GGAACACACC TGTGGTGCTA GTGTTGGGAT CGGGGGCGTT TAACGCTGGT GGGCAGCAAT 60
 AAGGGGCAGA TGTGCCCAGA TGCTGCATC CCCAGGGTGC CGAGGGCAGC AGGAAAAAGT 120
 GGGGACCTCG GTGCATTGTC CCCACCCCTC CCCTCCCTGG GCTAAAGCAC AATGTTCTCC 180
 CCGCAGATTA ATGACCCTGC ACCCTCCAGG CCCCTACTCA CATCCTCCCC CAACCGGCTT 240
 CGGGTCCTCC CACCACACTC TGGTTTCTA TGCTGTTTG GTGCAAGTAC AACTGTCGTA 300
 GTCATGGCTT TGGGATGGGT TCTGTTTATT AAAATCCTAT TACTCGAG 348

(2) INFORMATION FOR SEQ ID NO:723:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

GAATTCGGCC TTCATGGCCT AGTAGTTGTT CCATGCTGTT GTTTTTTGTT TTATCTTTCA 60
 TTGCTTTTCC CTCTGCAGTC AACATTATGA CCTGGGGACT CCAGCATCCT TCAAGCAAGC 120
 CATTTCGAA GAAGGTGAAA AGAAGCCAGG ATGATTGGCA CCTCCTCCTC CTCCTCCTCT 180
 TCTTCCTCTT CCCTTGCCCA GCCCCCTCCT GTGCGTGTGT TTCAGACAAC ACAGGAGCCA 240
 GCACAGGAGT GGAAAATCCT GTAGCGCAAC TCGAG 275

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GAATTGGCAT CTTTTCATTG CTTTTCGCCCT TTGAGAGTTG TTTAGTTTTT TAAAAGTCAG      60
ATAATTTTGG ATTATATTCT AGACCTTTTG AATATTATGT TATAGGACTC TGGAGTCTGT      120
TAAAATCTTT AGGAAGACAT TAATTTTTTG AATTTTAACA GACAGAAATC CTTGTTATAT      180
TGATCCATTG GTTGTGTTCTA CACTTGTGCA CCTTGGAGAT GAGTCTGACT TCATATGCAG      240
AATTTAGTAT CCCTTCTTGG AGCTCCCTCC CCTCTGTGAT CCTCCCCATT CTTCTTTTCT      300
CCCAAGAACT TCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AGGGTCAGTG AATCTGCATT ATTACATAAA AAATAAGGCA      60
GAGGAAGCAA TCAAATATGC GTTTGTCTCT GGTGAGCCTC AGCAGGGATG ACTTTGAGTT      120
CTGTCTGTCC TTTGTCCACA AGGAATTTC TTTGTGAAAA TTGTGAAGGA GGTATGTCGC      180
TTCTTAACTC TGTACCTATC TTATTTAGGA ATAAAATGGG AGGCAGGTCT GTCTGACATA      240
GTTCCCAAGT TGACTTTTCC CCTGACTTAG TGATTTTGAG GTCTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```

GAATTCGGCC TTCATGGCCT ACACACTAAT AGGATTGGAT TTATGTATGT CCAGCTTGGG      60
AATTATTACA GGAATTAAAA ACAACTTTTT AGAGTGCTTT CCTGAGCTCT CTTTCTATTT      120
GTTCCCCCTT CTACTTTTTG CTCCCTGTG GCTGCTGTTT CTATCCTCCA GCCAGAGAGC      180
TAGTGTATAT TTTCTCCATT GTGTTACACA CTTGTGCAGC TGCAACCACC ATATCCAGGG      240
GCTCGAG                                     247

```

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC	TTCATGGCCT	AGAATTCTAG	ACCTGCCCCG	GTCTTCCTCC	TCGTCTCTGCC	60
GCAGGGCCAG	AACCCCTGAC	GGTATTACAG	TGCGCGTAAG	TCTGGCCGGT	GCCATCTGTC	120
TCCGCAATGC	CCCCCAAGAA	ACAGGCTCAG	GCCGGGGGCA	GCAAAAAGGC	GGAGCAAAAA	180
AAGAAGGAGA	AGATTATCGA	AGACAAAAC	TTCGGTTTGA	AGAATAAGAA	AGGAGCAAAG	240
CAACAGTTAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC	TTCATGGCCT	AAGTGCTTGC	GCTCTAATAA	CCATGTTTAT	CTCATGCCTT	60
TGGGCGCTTG	CATATGTGTT	TCCTCTGCTG	ACACCAACCT	CCTCCTCCTC	CTCCTCCTCC	120
TCTGCTTGGC	TGGCTTCTCT	CAGTCTCAGT	TGCGATACCT	TCTCTCTAG	GAAAGCTCCC	180
CTGACCACTC	TTTCTTTGGG	CTTCTATAAC	CCCCCTGTCT	GCCCCCATCA	GGGCACCTCC	240
CAAATTTTCA	TGTTTCCTTT	CCTCCTCCCC	AATCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 231 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCGGCC	TTCATGGCCT	AGAGAAACCT	ATTTTTTCAT	TTAACCTGTT	CTTTAAATCC	60
AGTATGTTCC	AGAACATACA	AAAATGTTTA	AATGTTCCAT	TTGTAAGAGG	ATATCATGTA	120
TTTTATATCA	ATTTAAATGC	AGTTATCCTA	ATCATTTTTC	TTTCATTTT	ACCCTTTATT	180
AACTCTTCAT	TTGTTTACAA	AACAAATCCA	CTCTATAAAC	GCAATCTCGA	G	231

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 253 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```

GAATTCGGCC TTCATGGCCT ACACACATAA TTAGTTATTT TACCATTCTT TCATAGTTTT      60
AAGAGCAAGT TTTCACAAGG GCGATTTGAA TTAGAGGGTA GAATAATATT TAAAAATCG      120
TTTTCTATTA TTCAAATATA GAATGTTATT AAATTTTTTG GTATCGCTGG TTAAGTGCCT      180
AGAACTTGAT CATCTTCTAT TTCTTTTCC TTTTGTCTAT GAGAAAAATA ATGCTCAGAG      240
AAGTATACTC GAG                                     253

```

(2) INFORMATION FOR SEQ ID NO:731:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```

GAATTCGGCC TTCATGGCCT AAGAGACTTA ATTATTAACA AAGTATTAGA AGCTAGAAGT      60
AGGTAAAATA AGTGATTATT TTAATAAAAA TTATCCTTAC TTTACAAAAT CCATATTAAAC      120
CTCACTTGAA ATTTTATGAG CTTTTCCTAT AAGTTTAAAG AGATAGAAAT CAGTGAAAGA      180
CCTCAGTAAT TCCTGCAATG ATCTTAATAG AAAATATTTT ATACCTTCTC TCCCTCGAG      239

```

(2) INFORMATION FOR SEQ ID NO:732:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATAAATAT CTCATTTTAA TTGTTACTTT GTTGGACTTG      60
ATTACTGCAA ACCTATCACT AATTCTTTCT GAGTTCACCG AAAGAAGTGC AAAACCCTTC      120
AATATATTAC CATCATGTGC TTCTTCTGTC CCACTCTTTT CCTTAGAGAC ATTTTGTTTT      180
TGTGTTTTT AATTGGTATT GTATTGTTTT TCAAATCTTT GTCCCCCAG GCTCGACCTA      240
TAGTGAGTCG TATTAATTTC AG                                     262

```

(2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT ACACACATAA TTAGTTATTT TACCATTCTT TCATAGTTTT      60
AAGAGCAAGT TTTCACAAGG GCGATTTGAA TTAGAGGGTA GAATAATATT TAAAAATCG      120
TTTTCTATTA TTCAAATATA GAATGTTATT AAATTTTTTG GTATCGCTGG TTAAGTGCCT      180

```

AGAACTTGAT CATCTTCTAT TTCTTTTTC TTTTGCTAT GAGAAAAATA ATGCTCAGAG 240
AAGTATACTC GAG 253

(2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

GAATTCGGCC TTCATGGCCT AGTATCACAG GCTTCTTCA AATAACCACT TCCTCTAAGA 60
 CATTGAAAAT ATAATTCGGT GTTTAAAATA AATTCATACC CGTTTGTGT GCTGTGCATA 120
 AATAGCAAGT ATATGTGTAC CTTACCAAAC TTATGGTCCC CAGTCCCCAA ATTCCAAAAT 180
 TATGCAGGAG GGAAGGTTAG CCATTGCAGT AAACAATTTT TCCCTATTGA CCCATGCTCT 240
 CCAGCTGATT ATGATGTGGG CAGTACTCAT CCAAGGCTAT ACAGACCAGC CGGGTCTCGA 300
 G 301

(2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

GAATTCGGCC TTCATGGCCT AGAGACACAA TGGGCTCCAA GAATTTGAAA TCCCTCATCT 60
 GTGAAGGCAG AAATACTAGG AGAATGGGTA ATGTTTATAC CATCAATGAA GAAACTCTTG 120
 TAACCTAGGG TTTTCAAATT ACAGAAGAGG AAGAACAATG GAGGCTGATC TCCAGTTTGT 180
 GACAGTCTAG ATAGGTGGCC TCAGTCTTGC TCTTATAAAT TCTAATTCCC AGAAGCTCGA 240
 G 241

(2) INFORMATION FOR SEQ ID NO:736:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AGTGTCTTCTA TCTTCCAATT TTCTTCTAAG TTTGTACATT 60
 TTGCCCTTAG CTTTTGTCTT CCTAGCTTGT CTTTTTCTT CTGCTTCTTA CTTTTCAGGT 120
 TTAAATTTAT CTTTTTCTT CTAAAAGTAT GTTTTATCT TCTAATTTCC CTATCTTCTC 180
 TATCTTTTTC TTCGCCTTCC CGTACTTCTG TCTTCCAGTT TTACACTTCA AACTTCTATC 240
 TTCTCCAAAT T 251

(2) INFORMATION FOR SEQ ID NO:737:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

GAATTCGGCC	TTCATGGCCT	ACAGGGTTGC	TGGGATGATC	AGTGATTTTG	CTAATATCAA	60
AAGTGCCCAG	CACAGTGCTT	GGGTTGTTGG	AGGCATTGAA	CACACGGCAT	TGTTATTATT	120
TATATGCCTT	GTAAGTGGAA	GAGCCTGTGG	GCAAACAGTG	GATGCTAAAA	TTCAGTTTGT	180
GGAAGAACCA	GGTGACAAA	CTCCTGTTCT	ACCTGTGGTT	GAGTCTACAC	TCCCCACCA	240
CACCCAGCT	GCTCTGATCT	ACCTCCTGTT	CCTTGAGCAG	GCCATTTTCT	TTCTTGCTTC	300
AGGGCAACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:738:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC	TTCATGGCCT	AGTGTGCTTG	TTCCATCTGG	TTTTCTTCTT	TCAAATTCGC	60
ACTGACTGTT	CACAAGCCGC	CTGGTCAGCT	TTCTCCAGA	TTCTTCACG	ATGCGGTCAA	120
GCTGCTCCTG	CTCTCTCTCT	AAATTATTGC	TTTAAACTT	ATCTCAAGC	ATATCTTGT	180
CTTTCTTTT	ATTTTCTTTG	CTGGGACTCT	TGAAGGCGTG	TGCTTCGGCA	TCTCCAGAGT	240
CCTCTCTCTC	TCTCTGCCAG	CAGCCTCCGT	CCTCCCCACT	CTGTGAGGTG	TCTGTTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:739:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 196 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC	TTCATGGCCT	AGGACTGTAC	CAGCGCTATA	CTGTAGTTAT	TTTTTTAAAT	60
GAAGTTCACA	TATTTTTGTA	TTCTTTCAAA	TTGTTTGCTA	TATATAAAAG	AAGCTCACTG	120
CAAAATGCTT	GAAGGAAAAA	AGGAAACAAA	AGAAATTCAG	AACTTCCCAG	AAATGTACAG	180
CTTTTCGGCC	TTCATG					196

(2) INFORMATION FOR SEQ ID NO:740:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

```

ATGGCCTATG CCTCCCCACT CCACCCACCT CTGCCTTCCT TACTGCTGTA TCTGCTGCTT      60
GAACTGGCAG GAGTCACACA TGTGTTCCAT GTGCAACAAA CGGAGATGTC ACAGACTGTA      120
TCAACTGGGG AGTCAATCAT CTTGAGTTGC AGCGTACCCG ATACCTTACC AAATGGACCT      180
GTCTTGTGGT TCAAGGGAAC AGGGCCAAAC CGGAAATTAA TCTACAATT TCAAACAAGGT      240
AACTTTCCCA GAGTAAAAGA GATTGGAGAC ACCACCAAGC CTGGCAACAC AGACTTTTCC      300
ACACTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

```

GAATTCGGCC TTCATGGCCT ACTGAAGGTA GGTGAGTTCA TCCTCTTCAT AGTAATGCTG      60
TTTACCAAG ACTTTATAGC AGATGGACCC AGAAAGAATT TTCTGCTATT GTGTTCACTA      120
CAACAGGATA GGGACATCAG ACAGCCCCAG AAACCCCTTC CAGATCTGAT ATGGGACTAT      180
TAATTTTAT GCTGTTAATT GGTATTCATT CACAATGCAG TTGAAGGGGG AAGGCTCCAC      240
TGCATTCTTT GGCTAAGGCC TGAATGCTTG CTCATCTGTA AGATCTATAC TCGAG          295

```

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```

GAATTCGGCC TTCATGGCCT ATAAAAAGTG GGCCAGTTTA AAGAAAAATT TTATCTAAGC      60
AGTAGTACAG CTGGCTTTCC AATATGGCAA AATAAGTCTT TCTGTAGGAG ATATCACCAT      120
TTTGGCAGGA TTGAAAAGCC TCTGTTTTGG TGCCATATAA TCAAACTATA TCTGTGATTT      180
GAAAAATGAC AAAGGGTATA ATAATTCCTA GAATTGTTT TAAATGAAG GAAAATAGTA      240
TCCTAGTTCA AAAGTTATGG CTCATTGTAA GTGCTGGTCT GGTATAACCA TACAGATTGT      300
TTAAAATCTT TAAATAAATA CTTGGCCCAA TCCCTTTTGT TCCCCCTTTC TCGCTGCCCT      360
GTAAACTCGA G                                     371

```

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAAATGACTC TAGCCTGTGG AAAGAGAATC ATAATTCTAC GGACCTTTTA AATCCGCCAG	60
GAACCCTGAA TATCTATCTT TTTTGCTTGA CATGTCTCAT GACTTTTGCA GCCTTGGTGG	120
GCAGCATTTA TTTACTAATT TCCCTGCTGA AAATGCAGAA CAGAACTGTT GTGTCCATGC	180
TTGTGGCTTC CTGGTCTGTG GATGATCTCA TGAGCGTCCT GTCGGTGACC ATCTTCATGT	240
TTTTGCAGTG GCCAAACGAG GTCCCCGGTT ACTTCCAATT TCTGTGCAAC ACCTCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC TTCATGGCCT ACCCTAAGAG AAACCTCCTG GTGATAATCA CAGGGTCCAA	60
AAGTAAAGGA AACCTGGCAG TCTCTGGTGT CCATCATGTG CTTATTCCAC TTGGTAAAAT	120
AATTTGAGAT GCCTTCTAGT AAGGAATGGA CCTTAGTGGT GATGGTTAGT TGC GTTATGA	180
TGACAGCCAC TGGGTGGAG TACTTAGAAA GCTTCCGAGT ACTAGACAGC TCCACAACCT	240
CTTCAAAAGT ATCCATGGGA TACAAAGGCT TAGGATCATT GAGACACTGA ATCAAGGGCT	300
CAATCTGGTA AAAATCTGCT TCTTTCCGAA GCAGATCAAA TTCCTTAAAA TCCNACGGTA	360
AGGTCAATTC TGAAGTTCTT AAGAAGTTGA GGACATATCG GAAAAGAGGT CCATCTCGAT	420
CAATAAAGTA ATTGCCTTGA GGGTCTCGAG	450

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

GAATTCGGCC TTCATGGCCT ACTTATTAAC CCCAATCAAT AGAGTTGAGA GACTATGGCT	60
TTAAAAAATT AATGCAAACC TGGCTTTAGC TGTAATAACA CCCACCGTAA GCACTTGGAC	120
TTAGTTATTA TAGACAAATG TAAAGAAAAT TTAATGAAAA ATAACACCCT CTCTCTTAA	180
AAAAAGAAGT CTCAGGCAAT AGATGCCTGG TACTATGAGG AAGAATGTTA GAAATAGAAG	240
TGAAATCCCA GAGAAGCCCN AAACCCCCCA ATCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GCAATATCAA ATAGCTAACT TCACCCCCAA CCACAGTCCT TGCTGTTGGC ATTTACTCAA	60
CTAGTCTTTA ATTCCTGTTT GACAACTTT ATAAGGTGCT ACAAGACAGA TGATTTTTC	120
CCATCTACCA TAATGTGGAA CAGATATTTT GTCTTCTATC TCCTGCTTTT GTCAGCGTTT	180
ACGAGTCAAA CAGTATCCGG ACAAAGAAAG AAAGGACCAA AATCAAATTT GCTTGCAAGG	240
AAAAGTGATG TCCAGGGGCA CCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:747:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GTTCTACCTG GAATATGGTC CTTCTACCTG GAATATTTTT TCCTCAGGCC TTCTCTGGCT	60
TCTTCTTCTT TTATTCCTTG GATCTCAGCT TAATCATCTC TTTGGCAAGT ATCCATGATC	120
CAAAGTGGGT TAGTGCCGCT CCCAAGACCC CCTTTATTAA CCCTGTACTG GCACCTAAAA	180
CATACTCTAT TGTATTTGCC AGCTCCTTGG CCTGTCTGCA AGTTCCTTCA GGCATGCTGC	240
CATCATTCCT ATTTATCACT GTATCTCCTG TGCCACAGCAG TCTCGAG	287

(2) INFORMATION FOR SEQ ID NO:748:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGGCC TTCATGGCCT ACTTTATCTG CCTCTACACT CTCTTCTGGT TATTCAGGAT	60
ACCTTTGAAG GAATATTCTT TCGAAAAAGT CAGAGAAGAG AGCAGTTTTA GTGACATTCC	120
AGATGTCAAA AACGATTTTG CGTTCCTTCT TCACATGGTA GACCAGTATG ACCAGCTATA	180
TTCCAAGCGT TTTGGTGTGT TCTTGTCAGA AGTTAGTGAA AATAAACTTA GGGAAATTAG	240
TTTGAACCAT GAGTGCACAC AAGAAAAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:749:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCGGCC TTCATGCCTA GGCAGTTTTT GTTGCCCTGCC ATTTTTTTTT TTTTTTTTNG	60
CACATCTCAT TATATATTTT TTGTGATCTT TGGAAAGTGA ACATTTTACA GAATACATTA	120

TAGCAACTCT	GAGTAACCTT	CTCCCAGGTT	TATTTGTATT	TGCTCATTGC	TTATTTATTT	180
ATTACTAGCT	GGGTTTTTTT	AGTGGCACCT	ACTCCTCTCC	CCACTTAACC	CTCTGATGTT	240
ATGCTTGTTA	TGCCTGATCA	GGGCAGTTAC	GGATTGAATT	GTGTCCACTC	AAAATGTATA	300
TGCTCATGCA	CTGACCTCCA	GTGCCTCAGA	ATGTGACACC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:750:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GAATTCGGCC	TTCATGGCCT	ATAGAGTAGT	GATTTTGGTC	AGCGTGTGTG	CTATTTCCGGT	60
GTTTCAGTTT	TTCAGCTGGT	GGAAATAGCTA	CAATAAGGCA	ATCAGCTACC	TAGCCACAGT	120
GCCCAAGTAC	CGTATCCAAG	CTACAGAGAT	TGCCAAGCAG	CAGGGACTGC	TCAAAAAAGC	180
CAAAGAAAAA	GGCAAAAACA	AAAAGTCCAA	AGAAGAAATT	CGTGACGAGG	AGGAGAACAT	240
CATAAAGAAC	ATTATAAAAA	GTAAATAGA	TATAAAGGGT	GAACTCGAG		289

(2) INFORMATION FOR SEQ ID NO:751:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GAATTCGGCC	TTCATGGCCT	ACGTAGGCAG	ATGGAGCTTG	TTATAATTAT	GCCCCATAGG	60
GATAGTACAA	GGAAGGGGTA	GGCTATGTGT	TTTGTGAGGG	GTTTGAGAAT	GAGTGTGAGG	120
CGTATTATAA	CAAGCTCCAT	CTGCCTACGA	CAAACAGACC	TAAAATCGCT	CATTGCATAC	180
TCTTCAATCA	GCCACATAGC	CCTCGTAGTA	ACAGCCATTC	TCATCCAAAC	CCCCTGAAGC	240
TTCACCGGCG	CAGTCATTCT	CATAATCGCC	CACGGGCTTA	CATCCTCATT	ACTATTCTGC	300
CTAGCAAAC	CAAACTACGA	ACGCACCTT	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:752:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 280 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AAGGAAAGAA	GAGCAACTTT	GTCAGCTTGA	GAAGGAACAG	60
AAAGCCGCCC	TTCCAGCTA	TTTCCAAAAT	AGAGTCTGCC	TTTAACTGTG	GATGTCCGAG	120
GTTGCGCTGA	TTTTAGGGC	TATTCTCAA	GAGAAAGGCA	GAGTCAGTCT	TCCTGCCTTT	180
CTACTCTCAG	GCCTCTTTC	TGAGTGCTAG	AAGGAGCTCT	TTTAGTTGGT	TTATACCTCG	240
GGACCCTTAT	TTCCCTCTCA	CCCTCGGCC	CAATCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:753:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```
GAATTCGGCC TTCATGGCCT AAGAAGAAGT AAAGTGCCTT GCCTGGACTA TTTCCAATGA      60
TGCCAAACAA TAATTGTTGC CCCTGTCTT TCTTAAAGG AGACTGCATC CATTTAACCA      120
AACTAAGAAA TTTCAATTA GTCCTCTGCT GAAGTCATAC TATACACATC TACTTAATTA      180
AAGATACATT TATTGAAGAG AACAGGTCTC CTCGGGTTT ATCTGCTATA GCCTTGCTTA      240
GGAAAGGAAT AATAGTCTGT CTTTAATTA GGTGTGGCTA TTGATTGGAG CAAATGTTGT      300
CAGGTGGCCC AAGCATGAAT CAATGAGTGA CCATGAGGTC ACCCATCAGT GAGGGCACCC      360
CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:754:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```
GAATTCGGCC TTCATGGCCT AACCTATTTG CCTCAGTCCT ATCTGATTCA TGAGCACATG      60
GTTATTACTG ATCGCATTGA AAACATTGAT CACCTGGGTT TCTTTATTTA TCGACTGTGT      120
CATGACAAGG AAAGTTACAA ACTGCAACGC AGAGAACTA TTAAAGGTAT TCAGAAACGT      180
GAAGCCAGCA ATTGTTTCGC AATTCGGCAT TTTGAAAACA AATTGCCGT GGAAACTTTA      240
ATTGTTCTT GAACAGTCAA GAAAAACATT ATTGAGGAAA ATTAATATCA CAGCATAACC      300
CCACCCTTA CATTTTGTGC AGTGATTATT TTTAAAGTC TTCTTTCATG TAAGTAGCAA      360
CGGGCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:755:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

```
GAATTCGGCC TTCATGGCCT ATGGAAAAC ACTCATTTCAT TCTTCAGAAC TGTTTTTCAGG      60
ACTTCAAGGA GGCCTTCCCT AACCACCCTA TTAAACATTC CAGTTCTTGC ACCATCCCCA      120
CCCCTACTCT GCCCTCACTT TTTTCTCCAT GGCCTGGGC ACCAGCTGGC TAAGTCTGTC      180
TTCAAAAAGT ACTTTTCTTT GGGGGAGGTT TTTCTTTGT TTTTGTTC TTTCTTTCAG      240
TCCTGTATCT TCAGCACTTA GAAGAGTTCA TGGCACACAT CTCGAG      286
```

(2) INFORMATION FOR SEQ ID NO:756:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GCGCCGAGTG	GGACAGCGCT	GGTGCGGAGA	CTGCTTCCGG	ACTCCAGGTA	CCGCGCTTGG	60
CGGCAGCTGG	CCCCAGACTT	CTGTCTTTTC	AGCTGCAGTG	AAGGCTCGGG	GCTGCAGAAT	120
TGCAACCTTG	CCAATGGACC	TGATCGGTTT	TGGTTATGCA	GCCCTCGTGA	CATTTGGAAG	180
CATTTTGGGA	TATAAGCGGA	GAGGTGGTGT	TCCGTCTTTG	ATTGCTGGTC	TTTTTGTGG	240
ATGTTTGGCC	GGCTATGGAG	CTTACCGTGT	CTCCAATGAC	AAACGAGATG	TAAAAGTGTC	300
ACTGTTTACA	GCTTTCTTCC	TGGCTACCAT	AATGGGTGTG	TTCTCGAG		348

(2) INFORMATION FOR SEQ ID NO:757:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GCGAGGTCAG	GAGCTATGGG	ATGGTATTAA	TACATTGGCA	GAGCAACCCA	AGGGGGCAGC	60
ACATGCAGTG	AACTGCCATG	CAGAACTCCC	GACGGGCCCTC	TTCCCCATCC	CAGAGTGGGG	120
AACAACACGC	CGTCACAGAC	AAGGAAGTGG	GTGCCCCCGT	CCCCTCCCCG	ACCCCGAGAC	180
CCAGGAGTGC	TGGGCTCCGA	GCAAGTCTAT	TGCATGCTTT	CCTGGCCAAA	GCTATATGGA	240
AAGCGGGAAC	AGCAGGCTGG	GGAGATGATG	CTGGGGGGTG	GGGAAGGAAA	GCGTCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:758:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

GAATTCGGCC	TTCATGGCCT	AGAATATTTT	ATTATAAATA	TAATATATGA	TTTTTTAACC	60
TGTTTTGTTG	CCTCATATGC	TGTCAGGTTA	ATTTGTTTTT	CTTCGTGCCA	GAGGTGGGGA	120
GGAAGGCACT	CTGTCTGCTG	GGTAAATGCC	TAAATTCACT	CACCTTCATG	GTTGGGGGCG	180
AGCATGGTCA	TTGTGGATAT	TGGTTTTGTG	GAGTTGAGGG	AACTTAGGAT	ATAAGTTCAC	240
TCCCTCTATT	TTTCTTGTG	ATTGAGTTTT	TCAAAAATCT	TTTTTCTTTC	CCTTCTCCCC	300
CATTGTGGAA	ATTACAAATC	AAAGGCCTTT	TTCTTTAATG	TAAAGTGTAT	TTATTTAAAA	360
AAAATACAAA	ATAAACTACA	AGTCTATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:759:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

GAATTCGGCC	TTCATGGCCT	AAGCACATTC	AAGATGCCCA	CNAGAACCAT	CGTGTGGGC	60
TCATGTTTAT	TACTTAAGCA	AGAGAGCTCT	TACCCAAATT	CCTTTGTTTC	CCCACTGTCA	120
GAAACAACAT	AGTCTGGAAC	TGGAGGCCTA	GAAGTCTGGT	TGTATTTCTT	GTAAGTGGTA	180
AAAGTCNACA	AAGATAATGA	ATGAGGCAGT	GTCTCCTCAT	GCCTTCATAT	TTTCTTTTGG	240
TATTTTAATT	TTTTTTTATT	TTTTATTTT	GTGGGTGATA	GTAAGGTATAC	GTATTTGTGG	300
GGTACGACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

GGAAAAAAAA	GGTAAGATGG	ATGAAAAGGA	GGAGAAGGAA	TTTAATACTA	AGGAAACCAG	60
AATGGATCTT	CAAATAGGAA	CAGAGAAGGC	TGAAAAGAAT	GAAGGTAGGA	TGGATGCAGA	120
AAAGGTGGAA	AAGATGGCAG	CAATGAAAGA	AAAGCCTGCA	GAAAACACTT	TATTTCAAGG	180
CATACCCAAA	TAAAGGAGTG	GGTCAGGCTA	ATAAGCCTGA	TGAAACTAGT	AAACTAGTA	240
TTTCTGGCTG	TATCAGATGT	ATCTAGCAGT	AAACCAAGGT	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 482 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

GCTCGAGGCA	GGGGGAAATG	GCGGCTTCAG	GAGAGAGCGG	GACTTCAGGC	GGCGGAGGCA	60
GCACCGAGGA	AGCATTTATG	ACCTTCTACA	GTGAGGTGAA	ACAAATAGAG	AAGAGAGACT	120
CGGTTCTAAC	TCGAAAAAAT	CAGATTGAAA	GACTGACCCG	TCCTGGTTCC	TCTTACTTCA	180
ATTTGAACCC	ATTTGAGGTT	CTTCAGATAG	ATCCTGAAGT	TACAGATGAA	GAAATAAAAA	240
AGAGGTTTCG	GCAGTTATCC	ATCTTGGTGC	ATCCAGACAA	AAATCAAGAT	GATGCTGACA	300
GAGCACAAAA	GGCTTTTGAA	GCTGTGGACA	AAGCTTACAA	GTTGCTACTG	GATCAGGAGC	360
AAAAGAAGAG	GNCCCTGGAT	GTAATTCANG	CAGGAAAAGA	ATACGTGGAA	CACACTGTGA	420
AAGAGCGAAA	AAAACAATTA	AAGAAGGAAG	GNNAACCTAC	NATTGTAGAG	GNGGNACTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 83 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

GGGGGATGCC AACATTTAAA GCAAGAGGCA GAAGGGCTCC TGCAGGAGAC AGGGAATCGG	60
GAAGGCAGCA GGTAAACTC GAG	83

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 296 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

GAATTCGGCC TTCATGGCCT AGGAATTGAA AAGAAAGGCA GAGGAGGAAA GGATTCGCCT	60
AGAAAGAGGA AGCCCGAAAG CAGGAAGAAG AAAGGAAGCG GCAGGAAGAG GAAAAGAAAA	120
AACAGGAAGG GGAAGAGAAA AGAAAGGCAG GCGAGGAGGC CAAGCGGAAG GCTGAGGAGG	180
AGCTGTTGTT GAAAGAAAAG CAAGAACAAG AAAACAAGA GAAAGCCATG ATTGAAAAGC	240
AGAAAGAAGC AGCAGAAACA AAGGCCCGGG AGGTAGCTGA ACAGATGCGT CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 289 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

GAAAAGAAAC TAACCAGGAT TCCCTCAGTG TTATTTACTG GGATTGGCAT ACGTGTTCAC	60
AGGCAGAGTA GTTGATCTCA CGCAACGGGT GATCTCACAA AACTGGTAAG TTTCTTATGC	120
TCATGAGCCC TCCCTTTTTT TTTTAATTT GGTGCCTGCA ACTTCTTAA CAATGATTCT	180
ACTTCCTGGG CTATCACATT ATAATGCTCT TGGCCTCTTT TTTGCTGCTG TTTTGCTATT	240
CTTAAACTTA GGCCAAGTAC CAATGTTGGC TGTTAGAAGG GATCTCGAG	289

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 306 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GCACCAAGAG ATGTTTATTA GGGCAATCAA AAGATGATT ATTATTTTTT AAAAAATCAA	60
TGTGGCCTTC CCTTCCTCTT TCTTTTGATT CCCCTCTTG AGTTTTTATG TGTCTCTTTT	120
GCCTTCCCTT CCCAGAGTGG AGGAGTTAGA CCTGCATTGT GGGATGAGAG GAGTTGTGGC	180
TATGTGTCTG CTGGCACCAA GAGGGCTGAG GGTGAGGTGT GGAAGGGACA GGGGGAGGAG	240
ATGGGCAGCA TTGTTAAGAG ATTGGTACCA CTGAGCAAAT ATGTTGAGAA TGATGATTGG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

GAACTTTGAC ACCTACACTT AAATTCTGAG TCATTAAACA GGCCTACATT TATCAACTGT	60
GGAAATATCA GCCAGTTTTT GCAAACCTCT TCTTAGGACA CTAAGTTGTT TGCAGAAATC	120
ACTAGCATTG ACTGACTCAG CAACAATGTG GTTATATTCT TTGATTAAT TAGTCCTTTT	180
TCTTGGTCAA GAGTCAGTAG ACAGGACTGA AGCTTATGCC CCTTGCCCCC CCACCACCAC	240
TCCATTACTA CCACCTTGGT TTAGCCATCC TTTTCTTGAT CTGTTCTCCC CACTTCTACT	300
GTGCTACTCT ACAGACTTGC CCTGAATGTA AGAGCAACAA TTACCTTGTA AAGTCCAAGT	360
TGGGGCAGGT CACTCCCAA CTCCACAACC TCGAG	395

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC TTCATGGCCT GCCTCGCTGC TTTCTTTTCT CCAAGACGGG CTGAGGATTG	60
TACAGCTCTA GCGGGAGTTG GGGCTCTTCG GATCGCTTAG ATTCTCCTCT TTGCTGCATT	120
TCCCCCACG TCCTCGTTCT CCCGCGTCTG CCTGCGGACC CGGAGAAGGG AGAATGGAGA	180
GGGGGCTGCC GCTCCTCTGC GCCGTGCTCG CCTCGTCCT CGCCCCGGCC GGCCTTTTC	240
GCAACGATAA ATGTGGCGAA TCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

GAATTCGGCC TTCATGGCCT AGCATGTCTT CTGCCTCGGC CTCCCGGTA GCTGGGATGG	60
CAGGTGTGCA CCACCACGCC TGATTTTTGT ATTTTATAGTA GAGATGGGGT TCCATCCATC	120

CATTCCTAGG	CCATGAAGGC	CGATCTTGTT	TTCCTGAAAG	TATGGCATCA	AAAATACTTG	180
TAGAAAAACC	TTGTCACAAC	TGATTTGAAT	GTTTCTATT	TCTTTTCCTT	TGACTTTGAT	240
ATTGGCTTGT	AATGTCTCTT	TTCATCATAT	GTAATATCAG	TGGAACAGGC	AGCGCTACTC	300
AAGTCCTAAG	GATTCCTCAG	TGATCAGTGA	TCCAGGGCCG	TTCATGAACC	ACTGGGCTGG	360
ATTTGACTGT	TGAGTGTGGC	AGTTAATGCC	CCTCAAGAAA	TCAAAGGATG	TCTTATAAGT	420
GTCTTCCAAA	AAAAAAGCAA	ATGCTGAAAT	CCTATTGGCA	AAGTAACTG	AAATTGGCTG	480
CTACCACTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:769:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

GAATTCGGCC	TTCATGGCCT	AACGTGAGCT	GCAGGAGCTG	GCCCCGAAGC	TGCAGGAGCT	60
GGCCGATGCC	TCAGAAAACC	TCCTTACCGA	GAACACGTGG	CTCAAGATCC	TGGTGGCGAC	120
CATGGAGAGG	AAACTGGAGG	GCAGGGATGG	AGCTGAAAGC	CTGGCGGCCC	AGAGAGAGGT	180
CCACCCCAAG	CAGCCTGAGC	CCTCAGCCAC	CCCCCAGCTC	CCTGGCAGCT	CCCCTCCACC	240
TGCCAATGTC	AGCGCCACAC	TGGTGTCTGA	AAGGAATAAG	GAGAACAGGA	CAGACTAACT	300
TTTTAAATGA	TATGAAGTAA	ACTCGAG				327

(2) INFORMATION FOR SEQ ID NO:770:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 534 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

GAATTCGGCC	TTCATGGCCT	AGTGGANTCT	TGGAGATAAG	CTGAGCTTGA	TGCATTGCTA	60
CCACACACTC	CAAACCATGA	AGAAGGTACC	GTTGGGCTTT	TTGTTGTTGT	GACAAAATCG	120
TAGGAAATGG	CGCCTGTATT	TCTTAATCTG	TTCTCTAATC	TTCTCATTAA	AAAGAACTTC	180
AGTTAGAACA	AGAGGGCCCA	TGGCTTTTAC	ATCCAGTCTT	TCTGCTTCAG	CAACGATTTT	240
TTTGTGAGAT	GAATCAATAA	CACCCTCTTC	TTTCTTTTTT	TTAACAAAAT	CAAAGAGGAT	300
ATTGACCCTC	TCCTCAATTG	TTCTTTCCAA	ATCATCACTG	AGTGTCAGAA	CTTTTGCATG	360
GTCACCTGAT	TCATCCATTG	GACGCCTTTG	AGCTTCCTCA	GTGTATCTT	CTCCCCAGTC	420
ATCATCTCTC	TCTTCTTTCCA	TTGTATGTGG	AGGAGGATTA	ATTTCATTTG	GTGGTGGTGG	480
TGGTGGTGGT	GTCTCACTGC	TGGATACGGA	ATTGAATTCT	AGACCTGCCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:771:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GAATTCGGCC	TTCATGGCCT	ACTAGAATGT	GTGACTCTGT	GGGGACTGCA	TAGGTTTGTT	60
AATTGACCTA	TAGCTAAACC	TTAATGTGTT	TGTGTGTCTA	TACATTGCTT	TCCGCATTTT	120
AAGACATCCA	GACGCTATTA	CCAACATTTT	CCTGTGCATT	AACCTCTGCA	TGTGAAAACT	180
TTTAACAGTT	ACTGAACTAT	GTAAATATGT	GAATTTTTTT	ATTTAGGTGG	ATGCATTTTT	240
TGTCTGTTTA	CTGCTCTTCT	CAGCTTTATT	CAATAAACTT	GCATTTTAAG	GGTTGTATTG	300
GCAATTTTAA	CTTAAAATGT	GCATCATGAT	GGAAGGTGCA	GACTTTTTTG	GAAGTTTCCG	360
AGAGGAGGGT	CTATAGACCA	TTTGTGAGAA	ATCAGATCAA	CCCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

GAATTCGGCC	TTCATGGTGT	CGTCTCCATT	CTGATGCATC	AGCTCAAACA	GCTCTGAGTC	60
CAGGATCTGG	ATGAGGGAGC	GCATGTTGGC	AAAGTGGGTG	TCCATGGCAC	CCCCGTTGGG	120
GAAGTTCTGG	CTCATCCTCT	TCATGAGGTG	GCTGAAGCAG	CTGTAGGCCA	GCTGATCATT	180
GTCGAGGGTG	ACCAGGAGAG	GCGCCAGCAG	ATCGCACATG	CCCTGCACAT	AGCCCACGTC	240
CAGGTGCTCC	CACACGTAGC	TGCACATGAC	GTCTCTGAGC	CTCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

GAATTCGGCC	TTCATGGCCT	AATCCAGTGA	CTGACAAAGC	AAAATTGCAT	GAAATTTACA	60
TTTTTTTCT	TCTTGTAATT	TAAAACTGG	TTCCTGTATA	CCTTCCTGGA	TCTTTATACT	120
TTTGATCTT	TTCTACCATT	TCTGTAAAAC	CTCAACTGCA	GGGTGCAATA	ATGGGCCTTA	180
TTTTCTATAT	TTCAGCAGGA	CAGTTGCTGA	AAATGGGTTT	AAACTCCACT	GGCATTATAT	240
CCCACACAAC	TCGAG					255

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

GCNTTCAGGC	CNAAGGTACT	TTAATCAGTC	TAAATACTTG	AACATTTTTA	TTTCAGTGGT	60
AAAAAATAGA	CTGAGGCAGA	GTGAAGTTAT	AAATTAGAAT	CTAAAAATTT	ACCCTTCAAC	120

ATTAATATTT TTTAGTGCCT CTAATATAAA ACACAGAAAA CCTATCTCAA ATATAAAAGA 180
TGAATATAAA ATTATTAATT AAACAACNGG CGCTCGAG 218

(2) INFORMATION FOR SEQ ID NO:775:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

GCCTTCATGG CCTAGAAAGG AGCATCCCTG TTTTGGAGT CAGGACCATT CAGGGGGTGA 60
ACGAGGCCCA GGCCAGGTGC CTTTGGAG CCTGGAATAT TAAAACCAGG ATGCCAAAAT 120
TGTAGTGTGA TCTCAGTCTT TACATTTAAC AATTATATAC ATTTTAAACA TGAAGATTA 180
CAGTATAATT TATTTAGGCT AATCAGAAGC TAATTATAGG CTATTTAAAA ATGTTAATTT 240
GTAACACANT ACTCGAG 257

(2) INFORMATION FOR SEQ ID NO:776:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC TTCATGGCCT AAAGAAACAA AGAAACAAAC CGTATATATA TATCTTCAGA 60
GTAAAAAAT GGTGAGAACAA AGAGCATTGT TTTATATAT TTTCAACTC TCTTTAACTT 120
CTGGCTTAAT AGAAGACAGC TGCATTCTCA TTATTATTTA TTTATTTTTT TTAGATGGT 180
GTCTCGCTCT GTCACCCATG CTGGAGTGCA GTGGCGTGAC CTTAGCTCAC TGCAACCACC 240
ACCTCCCCAG GCTCGAG 257

(2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

AGCTTCATGG CCTAGTCTCA GGTTAAGTTT TTTGCAGTAA TCTTCTTTC CCCTAGAAGT 60
GAGTAAAACT TTCTGTATCC CTTTTCTCC CCACCTATGT TCCTAAATT AGTGATTCTC 120
TTACAAGGAA TTATTATCGC CCCTGCAGTT TTGGAAGGAT ACCTCCAAAA TATATCTTGG 180
GGACTTCGAT TTATAGAATT TGGTTTAAGC TTAGATTCTG AGTCCCAGGG TACCTGCCTC 240
GAG 243

(2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```
GCTGACAGGA GCATTATGAA GCAAATGGTC ATTGATACAG TTTCAGTGGG GGAGTATAAC      60
ACTGGGATTT TGCAGCCTGT GGTGTTCACT CTCCTGACCT CTATGCCAGC ACACAGACAG      120
CAAGAAGCAG TGGGGAACCT TGAGCTTCAA GCTCTACATT GGTTTGACAA AATCAATTCA      180
TCACTGTCTC ATTCATTAAT GTGCTGTCTG ATACTGACAT TTGTCAATGG CTTGTTTCTG      240
GAAGCCCCTG GTCCTCAAGG CTGGTCAGCT CTACAGTCAC AGCCCCAGGG TGAACCCAG      300
CAACTCGAG                                     309
```

(2) INFORMATION FOR SEQ ID NO:779:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```
GAATTCTAGA CCTGCCTCGA GCCTGGGTGA CAGAGTGAGA CAATGTCTCA AAATAATAAT      60
AATAATTTCA ACATGATTTT TGGTGCAGG AAACAAACCA TATCCAAACC ATTTACTCAT      120
CCTAGTTTCA GACAGTGTCC TGGGACTGAC ACAAGGGCTC ACAGCCAGCT AGCACTGTGG      180
GCTCTACGGG GTCCCTTCTG CTGTTTTATT TTAGTAGTTA TTTATTTCCA TTCCTCACTT      240
CCTACTACCAC TCGAG                                     255
```

(2) INFORMATION FOR SEQ ID NO:780:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 156 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```
GAATTCTAGA CCTGCCTCGA GCTAATGGGT GCATGCTACC ACGCCCGGGT AACTTTTTTT      60
TTTNCCTGTT TGTTTTGTTT TGTTTTGAG ATGGAGTCTC ACTCTGTTGC TGAGGCTGGA      120
GTGCAATGGC ACGATCTCGG TCACTGCAA CTCGAG                                     156
```

(2) INFORMATION FOR SEQ ID NO:781:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT      60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATTCTC      120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TTCCTTCCTT CTTTCTCTCT      180
TTTCTCTCTT NCCATCCCTC CCTTCCTTCC TCCCTCCCTT CCTTCCTCCC TCCCTTCCTT      240
CCTCCCTCCC TCCTTTCCTT CCTCCCCCA CCCACTCGAG      280

```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```

GAATTCGGCC TTCATGGCCT AGCCGTGTTG TTA CTGGTG AATGATAAGG CCTAGATCTG      60
GTAGTGCTTT TGTTTGCTCT AAGGTCTATT AATTTAATGT AGCAATCTTT CTTTTCCCTT      120
TTTCTTTTCT AACTTCACAT CAACCTAACT GGCTACCTAA ATGTTTCATTG AATGACTGTT      180
TTTGCTTTGG GATAGAATCC TCCTTTTFTA TTTTAGGGT GTTAAATTGA TATAGTATTG      240
TTTAATAGCT AATAAGATAC ATTTTGGGCT AAGTTCTTA GGCCATGAAG      290

```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

```

GAATTCTAGA CCTGCCTCGA GAATGGCTTT GCAGATCTGG GATCTTGTGT TCCTTCTTTC      60
TGGGTTGGTT TTATACGTTA ACTGTCAGAG GCATATGCCA CTTTATTCAG GTTCCTCGAG      120

```

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```

GAATTCGGCC TTCATGGCCT AGTTTAGGTC AGTAGCAAAT GGGCCCAGTG GGAGAGAGTA      60
TGCCCAGAGT TTGGAGAGGG TCAGGGTGTC GGGTGCTGGG ATGAGGGCTT CATGTTTGGA      120
AGACGCAAGG TAGAGAGCAA GAGAGGAGGA AAGGTAGAAC AGGATGGAGG GCAAGACCTG      180

```

TGTAAGAAGA AGTCTTAAAC TGTAACATG GGTGTAGTGA GGGTAGTGTG GCTAAGAGGA 240
AATGGATCCA GATGGGCTTG ATGGGTAGCA CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:785:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 233 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAATTCTAGA CTTGCTCTCA GGCAGTGAAG GACTGGCACA TTGTGTAATA AACAGAATCA 60
AAGGCAGAAA TTAGATTACA AGCCACCTGA TGATGATAAA ATCAATCACC CTCATCAAAG 120
GGATTTGCTT TGTGTGTGTT TTTCTCTTTC ATTCTTGTGG ATGCAGACAG GATATTGAAC 180
AGCAGCTGGG CTCCTTGATC TTGGCAACAG ACATCAACAG GCAGCGTCTC GAG 233

(2) INFORMATION FOR SEQ ID NO:786:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 203 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

GAAGATTTTG CCACTCTAAG GAGAGGTGAT ATTGTATTTT TTCTTTTAC TGAAACCAGA 60
TCGTGAGACA CGCTTTTCAT TCATACTTGA AACTTGATAA AATGTTGGC TTTATATTAA 120
TTTTCTCAAT TATAAGTGTG GGAAATGAAT TCGTTGATAA CCCTTTTCAA GTAAATGAAC 180
TGATTAGAAC CAGTAAGCTC GAG 203

(2) INFORMATION FOR SEQ ID NO:787:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

GAATTCGGCC TTCATGGCCT ACGAGATTGT CCTGGGTCAC ATAATGCCAG CTGAGCGTAA 60
AAAGCCAGCA AGTATGGAAG AAAAAGACTC TTTACCAAAC AACAAGGAAA AAGACTGCAG 120
TGAAAGCGCG ACAGTGAGCA GCAAGGAGAG GCCAAAAGAC GATATCAAGC TCACTGCCAA 180
GAAGGAGGTC AGCAAGGCCC CTGAAGACAA GAAGAAGAGA CTGGAAGATG ATAAGAGAAA 240
AAAGGAAGAC AAGAACCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:788:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

GAATTCGGCC TTCATGGCCT ACAAACAGCT GGAATGTCT CCAAGCCAGA GTGGACTACT	60
AGTAGGTATT CGTTACTTCA TTGAATTCTG CAGTGCCCCC TTTTGGGGTG TAGTTGCAGA	120
CCGCTTTAAA AAAGGCAAAA TTGTCTCCTT CTTTCTCTT TTGTGTTGGG TTTTATTCAA	180
CCTGGGCATT GGATTGTCA AACCTGCTAC CTTGAGATGT GTACCAAAGA TTCGCCCCAAC	240
AACTACCCC CACTCGAG	259

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 152 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

ATACTTTAAG TTCTGGGATA CGTGTGCAGA GCATGCAGNT TTNTTACATA GGTATACACG	60
TGCCATGGTG GTTTGCTGCA CCCATCAACT CCTCATCTAC ATTAGGTATT TCTCCTAATG	120
CTATTCTCC CTTAGTCCCC CGTCCCCTCG AG	152

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 241 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGGCAAATTT GGCCTGAAT ATGTACTGGA CTGTGATTAT	60
TTTTATTGTT TTAAAGTCA GCTTCCCTCC CTCCTCCTC CTCCCTCCTT CCCAAGCTGA	120
ATCTGAACCA AGGAAGTCTT CCTACAGAGC CACTGACTGG TCCCCACTAA GGCAGGGGTG	180
GAGGGAGGGG CAGGATGTTT TCCTCTCCAG CTTTGTCTT GCAGCAGATC CCCAACTCGA	240
G	241

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 182 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

```

GTATTTGACT CAAAGTATTT TTTGACTGAT AGCAGTATAG CTCCTCATT CCCTGCTCTC      60
TTTTGGTTAT CATTGTCATG AAATATAATT TTCTATCCCT TTACTTTTAC TGTGTCCATA      120
AAAGTGAAAT GAGTCTCTTA TGGGCAGGAT ATAGTTGGGC AATTTTATA CTAATTCTGC      180
CG                                                                           182

```

(2) INFORMATION FOR SEQ ID NO:792:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GAATTCGGCC TTCATGGCCT ACAATCTTCT TGGCCTGGCA CTAAGGACCT ACTACAGACT      60
GGCACTGAAA TATCTTCCTT ACCTTATCAT TCCTTGTGCT TCTCCACAAG CCCACTCTTC      120
CCCTTCATCA TACATGTGCC GACCTTTCCT GTCTCTTTTA CTTTGCAGCA CCAAATGCTT      180
TCTACTTTGT GGTCTAGGAG GAACACATGT CACTTTTGTG AGCTGCTCGA AAGCAGGGGC      240
CACACCTTCA TCCTTGTTT CCACACAACA CCAA                                     274

```

(2) INFORMATION FOR SEQ ID NO:793:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

AATTCGCCTT TCANGCCTAG TGAGTAGTTA TCAACACCGG AGATGCATTA GATCAATCTC      60
TGGGGGGCTT TTCCTGGACC TGCTTCCATA TACACTTATT CATTTTGTCT TCACCGGACA      120
TGTTAAACTT CCAGAGTGAC TCTAATGTGC AGACATGGTG AACATCATTC GCTTAGCTGC      180
ATGTCAGCGC TCACTCAATG TCTGTGAACA GTGAAAGCTA CTTATTCTAC TTATAAGTTC      240
ATTAAGTCTG TGTATAACTA TTGCAAAGCA GAATAGTTGT CCCAGCCACC TGTGTTGGG      300
GAGATGAAGC TGGGAGGCCA TCAACCTTCT TTGCAATAAA TTTCTCACG TTTTGTCAAG      360
CAACCTGTTT TTTGTATTCT CAGCTAGAGG CTTTCATTCT CTATCCCCCA CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:794:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAGATGGATG TCTCTCTTTG CCCAGCCAAG TGTAAGTTTCT GCGGATTTT CTTGCTGGGA      60
AGCGTCTGGC TGGACTATGT GGGCTCCGTG CTGGCTTGCC CTGCAAATTG TGTCTGCAGC      120
AAGACTGAGA TCAATTGCCG GCGGCCGGAC GATGGGAACC TCTTCCCCCT CCTGGAAGGG      180

```

CAGGATTCAG	GGAACAGCAA	TGGGAACGCC	AGTATCAACA	TCACGGACAT	CTCAAGGAAT	240
ATCACTTCCA	TACACATAGA	GAACTGGCGC	AGTCTTCACA	CGCTCAACGC	CGTGGACATG	300
GAGCTCTACA	CCGAATTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:795:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

GATTCGGCCT	TCATGGCCTA	GCAAAAGGGA	CAAGGGAGAG	AACAGGAGTA	GCAAAAATAA	60
AATAAGAAAT	TATGATGCTG	CTTTTACCAG	AGACAAGCTG	CTGCCACCAC	TAGGCTGGAA	120
CCTACAGGCT	GCACCTGTCC	CTAATTAGGG	TATTGGATAC	TATTCACACT	GCTCCTGCAA	180
CAACTGCTAG	CCTGTTCTAA	TCAGTAACTT	CTCTCTTCCT	CCTGTCTTCT	CACCCTCCAG	240
TTCTCTCTAA	CAGGAACCCA	GCTGGCAAAG	ATGTCTGGGA	AATGTCATT	GCATTCTCAG	300
CCCCAGCAGT	GCAGAAAGGT	AGGAGTGGGG	CTGCGAAACA	ACAGAAAAAT	AAGGACCATA	360
GGTGACAAAG	GAAATGCATA	TACACTTCAC	AGATGGCCCA	TAAACATATA	ATACAAAGAG	420
GTGCCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:796:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

GAATTCGGCC	TTCATGGCCT	ACTCATGAAA	TGTCCCAAAG	TCTTCTCATT	CTGTTCTTCC	60
CTCTCCTTTT	CTTTGGTCTT	ACTTCTGTAG	ACTCTAGCAG	AGATGGCATC	CTGGGATGGA	120
ATGGCAGAGA	TCTGATGCAG	TGGCATGCTC	ATCCCAACCT	CTTATCTGGT	CGTCTTCTTC	180
ACAGAAGAGA	GTCTCCACTG	GTAGAGTCAT	TTTGGGCCAT	GGATTTC AAG	CTATGCTTTC	240
CTTCTGGCAC	CCCGAATGTA	CGCAGGTCTC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:797:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 157 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

GCACAATATT	TCAAGCTATA	CCAAGCATAC	AATCAACTCC	AAGCTCGGAA	TTTAAATTAC	60
GAGGAGGTTA	GTTGTGGCAA	TAAAAATGAT	TAAGGATACT	AGTATAAGAG	ATCAGGTTCC	120
TCCTTTAGTG	TTGTGTATGG	TTATCATTTG	TTTCGAG			157

(2) INFORMATION FOR SEQ ID NO:798:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 249 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

```
GAATTCGGCC TTCATGCCAA ATGACCAGCC CCTACTGAAG TCCCCAGCAC CTCCTCTTCT    60
GCATGTAGCA GCCCTGGGCC AGAAGCAAGG GATCCTGGGA GCTCAGCCTC AGTTGATCTT    120
CQAGCCTCAC CGGATTCCCC CACTCTTTCC TCAGAAGCCT CTGAGTCTCT TCCAAACATC    180
CCACACACTT CACCTGAGCC ACCTGAACAG ATTCCTGCC CGGGGCCCTC ATGGACGGTT    240
GGGCTCGAG                                     249
```

(2) INFORMATION FOR SEQ ID NO:799:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

```
GAATTCTAGA CCTGCCTCCC CCCCCCCTT TCAGAATAAT TTACATAAAT ACTCCTGAGT    60
TCAATTTTTT TNAATTTTTT TTCTGCTTTT ACTTATTACC CTTTAAGTGC TTGCTTACTT    120
TCTCTGATAA TTTACTTTCT TCTACTCTGT GATTTCTTTT ACAAATCAAT GAAATGGTGT    180
TGTCTTGTGT TCTCAAGTTT TTTCTGTGTA CCTTTCCTGT GGTCACTGG ACATTCCAGT    240
CCGTTTTCCA CACTCTCCCT CTACCTTCTC CCCAGTTCT TTAAAGAGAC ACATAATCTC    300
GAG                                     303
```

(2) INFORMATION FOR SEQ ID NO:800:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 405 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

```
GAATTTTCGGC CTTTCATGGCC TAGCCATGCA ATATCTTTTG CATTACAGTG CAGTCTTTGA    60
GAAGAGCCAA GTGGGTGAGA GGTATATTTT CCGTGGTAGT TGAAGAGAAG GACAAATTAG    120
CACAGGAACA AGAACTTCAT GTAGTTGTGT TTGAAGGCAG TAGAATTGCC TTTTAAAAGT    180
CATATCTGGA TGTTAAGCTC TCTCTGGGAT CCAGTTATTA GGATGAAGAA ATTCTGCCGT    240
TTAAGTGCCT GCCATTTATA GAGGTTGCTT GTAACCTGTG TGGCTAGGTA ATTGTGCTGT    300
GTGAATTTTC TACTCAAGGT TGGTTTGGA GAAAGTAGAA TTCTGAGTCT GGGTATAAAG    360
GGGTTTACTA ACATGGGAGA GATTGTGTGT GAACCCAAAC TCGAG                                     405
```

(2) INFORMATION FOR SEQ ID NO:801:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 390 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```
GAATTGGCCT AATTAGCATC CTCAAGGACA CCAAATCAC GTGTGAGGAG AAGATGGTGT      60
CAATGGCCCG AAACACGTAC GGGGAGTCCA AGGGCCGGTG AGGGAGGGTA TTGCCCTCCG      120
TGAGCACAGA GACTCTCCAT GGGAGGGGGA GCAGTATTCT CCTGGATCCT GGGGCCTGGG      180
TGGGCTGGGG GACAGCTGAG GATGGGCCTA GCAGATGAAG CTTGCCAGCA AGGCCAAAGC      240
AAACGGTTTC TCCTGTGGAT AGTGGACAGA GACCTTTGTA ACCAATGGAA TTATTCATTT      300
TTCTCTATCT TTTATTTTTT CAAAGATATT ATTTGACTCT ATCAAAAGTC TCTCCTTTT      360
AAACCTTTTC TTATGGCGGG CTATCTCGAG      390
```

(2) INFORMATION FOR SEQ ID NO:802:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```
GAATTCGGCC TTCNTGGCCT ACTTTTTGAC CTTCTGAGTT TTAGTTTGTC CACTGAGTTT      60
TAGGTNAAAA AGAAAAAAAA AAAGGAAAAA TTATCTGTAA CCTCAAGACT TTTTATGAGG      120
ATTATGATTT TACTGTGTTT GATAATAAAT GCCTTTTGCA TGCACTGGTT TTCAGCATAC      180
AGTTATGAAC ATTTCTAGT GGATGAGCTT AAAAAAGGGG AAAAGCTCGA G      231
```

(2) INFORMATION FOR SEQ ID NO:803:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 492 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```
GGGACAAGGA CCTGTGCAGT GGCGTGACAT GACAGACGGA CCTGNTCAGC GTCCTATTTG      60
CAGTGATGTT CGAGTTTAGC CACCGTACTG TGGACATGCA CCCAGACAGC GGATTAAACG      120
TTAGTGTGTA CCCTATTCCC AGAAGAAAGG GTCCAAGAAA CACCCACACA GATCCCAAAT      180
GCAGCACACC TGTGTGTGGG CTTTCACTT TTGGAGCCCA CCAATGCCTG CCATCCCTAA      240
CAACTGCCTT CGCACCCACC AGGGATCAAG GCATTCTGTT TTTCGGAACG TGCTCCGACA      300
GTGGAGAAGT GCAGCATGGG AAGTTGTAT CTAGGAACTT GAAGCAAATA AATTCCTTTT      360
AATTCATGCT TGTGATCCCT GTTATTCTGT CTCTGAACTG TGCCTTTATG CTCCAGATTA      420
GCTTTGAATC TTATTGCTAG ATTCTCCAAT CTGTTTACAA AATAAATGCA CCTAATCTTC      480
GCCTGCCTCG AG      492
```

(2) INFORMATION FOR SEQ ID NO:804:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 444 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```
GATACATAGT TCAATTCAGT TCAATCAAAA CCATTCAATA CATATTTACT GAGTCCCTTC      60
TGCGTGTGAG GCACTGTTTC AGGCACTTGT GATATATCAG TGAAAAAAAC AAAGGCCCTT      120
GCCCACATGG AGCTTACATT ATAGCCAGGG GAAACAACAG TATACAATAA ACACAAATAT      180
GTGAAGTATC TAGGGTGATA GGTGATATGA AAAACATAGA GCAGGTGAAA GGGGTATGGG      240
ATTTCTCGAT CTGGAAGGTA GACAGCTGCA GTATTAAATA GTATGGACAG GATAGGCTTC      300
AGTAAGAAGG CAACAATTGA GCAAAGATGA GTAGGTAAGG GTATAGGGCA TCTGCAACAG      360
CTAGTGAAAC GGCCCAAAGG TTAGAACAAG GCTGGAGTTC GGGAGAGGTC TGGGCTGGAG      420
ATGTAGNCCA TGAAGGCCGA ATTC                                     444
```

(2) INFORMATION FOR SEQ ID NO:805:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```
GAATTCGGCT TTCATGGCCT ACAAGAAGCT GGAGGAAAAA AATACGCTGG CTCAGGGCTT      60
TCAGAGAAGA GAGGAAAATG GTACAGGAAG ATGAAAAAAT TGGCTTTGAA ATTCTTGAAA      120
ACCAGAAGAG GCAGGCTGCA ATGACTGTGA GAAAGTCCC TAAGCAAAAA GGTGTCAACT      180
CTGCCCCGTT CAGNTCCTCC TTCTTACCCA CCACCGCAGG ACCCGTTAAA CCACGGCCAG      240
TACCTGGTCC CCGACGGCAT CGCTCAGTCG CAGGTTTTTG AGTTCACCGA ACCCAAGCGC      300
AGCCAGTCAC CATTTTGGCA AAACCTCAGC ATGTTAACCC CCATCACTCG AG              352
```

(2) INFORMATION FOR SEQ ID NO:806:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```
GCACCCCGGG AGCTGAGTGA TTGCAGAAAC TGGCCTTCCA TCTCTCTCAG ACACCAAGCT      60
GCAGATCCAG GCTTTTCTGG GAAAGTGAGG CCACCATGGC TCTGGAGAAG TCTCTGTGCC      120
GGCTCCTTCT GCTTGTCCCTG ATACTGCTGG TGCTGGGCTG GGTCCAGCCT TCCCTGGGCA      180
AGGAATCCCC GGCCAAGAAA TTCCAGCGGC AGCATATGGA CTCAGACAGT TCCCCAGCA      240
GCAGCTCCAC CTACTGTAAC CAAGGTCTCG AG                                     272
```

(2) INFORMATION FOR SEQ ID NO:807:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GCCTTCATGG CCTAGGAGAA GAGCGGAGCG TGTGAGCAGT ACTGCGGCCT CCTCTCCTCT	60
CCTAACCTCG CTCTCGCGGC CTACCTTTAC CCGCCCCACC CTCAGGAACT TTGTGTTAGGA	120
AAAAATTGAA AGAACTTAAG TCTCGAATGT AATTGGAATC TTCACCTCAG AGTGGAGTTG	180
AAACTGCTAT AGCCTAAGCG GCTGTTTACT GCTTTTCATT AGCAGTTGCT CACATGTCTT	240
TGGGTGGGGG GGAGAAGAAG AATTGGCCAA GCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GAATTCGGCC TTCATGGCCT AAACACAGAA AAACCAACTT TCTGATACCT TTCTCCCTGT	60
ATGTTTATCT TCTTGTCTA GTTTTTCAGC AGAAATATGC CCGTTTCCCC CTGATAATTC	120
CCTTCCTTAG AGACAGCATA ATTGTAGACC TGGCCAGAGA AATGCTGAAA ACAAAGGGAA	180
CCCCCTTGAG CCCAGCCCTT CACCTGCTCT TAGCACTTCT TCAGAGGTTT ACTCTGGAGT	240
GAATGAAGTA GTGTGACCAG AACTCCTGG CACCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GAATTCGGCC TTCATGGCCT ACCTTCGCCT TCTGTCTTTC TGCGTCCTAC TAGCAGGTGT	60
TTACTCCAAT TCCTATGGGC CAGAGTTTGC TCACTGCAGA GAAATACAGT GGAATTCGCT	120
GGGCAATGGT TTGGCTTATG AAGACTTTAG TTTCCCATC TTTCTTCTTG AAGATGAAAA	180
TGAAACCAAA GTCATCAAGC AGTGCTATCA AGATCACAAC CTGAGTCAGA ATGGCTCAGC	240
ACTCGAG	247

(2) INFORMATION FOR SEQ ID NO:810:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

GAATTCGGCC	AAAGAGGCCT	ACCCGGGCTC	AGTGTGCCGA	CTTCTGACTG	CAAATGATCT	60
CATTTTCTAA	AATCTTTCTC	CCATTCTCCT	TTAAGAAAAA	ATCTTAGTTA	TTAAAAATCT	120
GCCTCACAAA	CTTAGAAATG	CTTCAGAGTA	AGTATCTGAG	AAGCAAGCCC	ACCCACATC	180
CACCATATAT	CATCGTTTCT	GTTAAGGGCC	ANCCCATTTC	TTCAGACAAA	TTCTATCTTC	240
TTCTCCCAT	CCCCTTACT	TTTGACTTTG	AAGGTGGATT	ATCTCATCTC	AAATTTCTTT	300
NCCAGAATAG	NACCACATTT	CAGCAAAATA	TTGGGTGGCT	GGTTCTTTTC	TTCAAGACCC	360
ACCTGCATCT	GTGTTGGTCC	TCTATGTGAG	GAAGGTCTCT	TATGTGAGAA	GATCTGAGGG	420
GTAGGCAGGT	TTTAATGGAC	TAAGATTTTT	TTTATATGTA	TAAGGGGGGT	GGGAGGAGGA	480
TTTTAGAAAA	CTAGATCCAT	TGGCCTGCAG	TTAGAAGTCG	AACACTGAAC	TTGGGAAGGC	540
TTTCTGTGGC	CGAACCTCGA	G				561

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

GAATTCGGCC	AAAGAGGCCT	ATCAATTNGT	TTTNTTACTT	GGTACTGTGA	TTTATTATNT	60
NTAATTATNG	TNAANTNNTA	AAGCTCAATT	TTACCAGCTT	CAGCAGTTTT	AAGTGTATAG	120
TTGCACAACA	CNACATAACT	CATCTAAGGT	GAATTATACT	GTAATTTTCT	TTTNGTGCCT	180
AGCTTTTTGC	NATTACCATA	GTATCCTGAA	GTTTTGTGAT	TGTNGTACCA	TGAGACAGGA	240
TGTTATAAGA	TTAATATTTT	AATGTATATA	TATGCCTAGC	ATATTTTCNT	TATGCATGCA	300
GCCACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

GAATTCGGCC	AAAGAGGCCT	AGGCGGCAGG	AGGCAGTGGC	GTTGGTGGGA	AGCGCAGCTC	60
GAAAAGCGAT	GCCGATTCTG	GTTTCCTGGG	GCTGCGGCCC	ACTTCGGTGG	ACCCAGCGCT	120
GAGGCGGCGG	CGGCGAGGCC	CAAGAAATAA	GAAGCGGGGC	TGGCGGCGGC	TTGCTCAGGA	180
GCCGCTGGGG	CTGGAGGTTG	ACCACTTCCT	GGAAGACGTG	CGGCTACAGG	AGCGCACGAG	240
CGGTGGCTTG	TTGTCAGAGG	CCCCAAATGA	AAACTCTTTC	TTCGTGGACA	CTGGCTCCAA	300
GGAAAAAGGG	CTGACAAAGA	AGAGAACCAA	AGTCCAGAAG	AAGTCACTGC	TTCTCAAGAA	360
ACCCCTTCGG	GTTGACCTCA	TCCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GAATTCGGCC AAAGAGGCCT AAGCAAGCTC TGCTTTAGTT TCCAAGAAGA TTACAAAGAA	60
TTTAGAGATG TATTTGTCAA GATTCCTGTC GATTTCATGCC CTTTGGGTGA CGGTGTCCTC	120
AGTGATGCAG CCCTACCCCTT TGGTTTGGGG ACATTATGAT TTGTGTAAGA CTCAGATTTA	180
CACGGAAGAA GGGAAAGTTT GGGATTACAT GGCCTGCCAG CCGGAATCCA CGGACATGAC	240
AAAATATCTG AAAGTGAAC TCGATCCTCC GGATATTACC TGTGGAGACC CTCCTGAGAC	300
GTTCTGTGCA ATGGGCAATC CCTACATGTG CAATAATGAG TGTGATGCCA GTACCCCTGA	360
GCTGGCACAC CCCCCTGAGC TGATGTTTGA TTTTGAAGGA AGACATCCCT CCACATTTTG	420
GCAGTCTGCC ACTTGAAGG AGTATCCCAA GCTTCTCGAG	460

(2) INFORMATION FOR SEQ ID NO:814:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 225 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

GAATTCGGCC AAAGAGGCCT AAAGTGCTTT AAAACAATTT TTCACTGTGG ACAACCGAAG	60
ACCACAAAAC ATTTGAGAAC TACCATGACA GACAGAGAAC AAAATTACAA AACAGAAAAA	120
GTTAAAAAAC AGGAGAACTG CACCACTGCA CTCCAGTCTG GATACCAGAG AGAGACTCCA	180
TCTCAAACAA AACAAAACAA AACAAAAAAA CCCCAAAAAC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:815:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

GAATTCGGCC AAAGAGGCCT ATTTATCGTT TAAAAAAGTC AGTAGAACTA AACATGAAAG	60
TGATTCTTCT GATTTTGTGG GGGGTGGTTA TTTGCACATG GAAACAACAA CAAAAATGCT	120
TCAGATACAA TTTGCTCGAG	140

(2) INFORMATION FOR SEQ ID NO:816:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 540 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GAATTCGGCC	AAAGAGTCCT	AAAACCAACA	AGCCAGGCTG	ATTTTCTAGA	GGGATCAGTG	60
ATGTGGGGTA	CAATGACACC	TTCCCTGTGG	CTTGTTATGC	CTCCGGTTTT	GTTTTTGAAT	120
CTTGTTGCT	GGTGGGGTAT	TGCCCCCTCG	GCTCCTCTAT	GCTTTCGCGT	GTGTGAAAAT	180
GCAGGAGTGG	ACCACTGTGC	ACAGCAGGAC	CATGGCTGTG	AGCAGCTGTG	TCTGAACACG	240
GAGGATTCTT	TCGTCTGCCA	GTGCTCAGAA	GGCTTCCTCA	TCAACGAGGA	CCTCAAGACC	300
TGCTCCCGGG	TGGATTACTG	CCTGCTGAGT	GACCATGGTT	GTGAATACTC	CTGTGTCAAC	360
ATGGACAGAT	CCTTTGCCTG	TCAGTGTCTT	GAGGGACACG	TGCTCCGCAG	CGATGGGAAG	420
ACGTGTGCAA	AATTGGACTC	TTGTGCTCTG	GGGGACCACG	GTTGTGAACA	TTCTGTGTGA	480
AGCAGTGAAG	ATTCTTTTGT	GTGCCAGTGC	TTTGAAGGTT	ATATACTCCG	TGATCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC	ANANAGGCCT	ACTNNNAGGC	CTGTTCGANAN	GCGTTGGGTN	CTGANGTGAC	60
AGCTTTCCCC	NTCCATGGGA	CNCNTTTC	GACNNTCGNC	ACNTCTNCTG	AGGTGAATTN	120
NCTGTGGGTN	TTANGTCTGG	GGTGGANNTT	CTCTCTCCCC	NNNTCTNACT	TCNGTAGATG	180
TGGACCTNGN	CCNNCNNTCC	ATTGGTCCNC	TGCCCTGTGT	CTCCAGGGTG	CTGCCTCTGC	240
CTCCTCATAT	CACCAGCGTC	CCCACTGCCA	CTAGTCTGTA	GGGGGATTCC	GGGCTAGGTG	300
CTCTTCCCAT	TCGACTTCAA	CCAACTTATA	TAGTCTCCATG	GTGGCCTGGG	CATCTTCCAC	360
AGAGGATGTC	CGCTCTTCCC	NACCTGGATA	TCCCGGTTTA	GCAGCTTCTT	GGTGAGATGC	420
TTCAGAGACA	TGGTGGCATT	CTCCGGGCAG	TCAGCCTTCC	GGTTGAGGGG	GGGATATGG	480
GAGGTGTAC	GGGTGAGGGA	CTTGGGGTGA	AAGTACTGAA	GGGCTTTGAA	GTGTTGTGG	540
ATGGCATGCC	CCACCACTAT	CTTNCCCTGT	GAGTATCTTC	AAGATCTGCC	CCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GAATTCGGCC	AAAGAGGCCT	AGGAAATGAA	ACGAATGCAT	AAAGCTCTCC	AGAAAGATCT	60
GCCAAGACCA	TCAGAAGTAA	ATGAAACTAT	TCTAAGACCC	TTAAATGTAG	AACCGCCTTT	120
AACAGATTTA	CAGAAAAGTG	AAGAACTAAT	CAAAAAAGAA	ATGATCACAA	TGCTTCATTA	180
TGACCTTCTA	CATCACCCTT	ATGAACCATC	TGGAAATAAA	AAAGGCAAAA	CTGTAGGGTT	240
TGGTACCAAT	AATTCAGAGC	ACATTACCTA	TCTGGAACAT	AATCCTTATG	AAAAGTTCTC	300
CAAAGAAGAG	CTGAAAAAGG	CCCAGGATGT	TTTGGTGACG	GAGATGGAAG	TGGTTAAACA	360
AGGAATGAGC	CATGGAGAGC	TCTCAAGTGA	AGCTTATAAC	CAGGTGTGGG	AAGATGCTA	420
CAGTCAAGTT	TTATATCTTC	CTGGGCAGAG	CCGCTACACA	CGGGCCAATC	TGGCTAGTAA	480
AAAGGACAGA	ATTGAATCAC	TTGAAAAGAG	GCTCGAG			517

(2) INFORMATION FOR SEQ ID NO:819:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 332 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

GAATTCGGCC AAAGAGGCCT ACTAAATTCT CATATATCTG TGTTTCTAGA ATACTTTGCC	60
TTTTTGGGCT TAGTTAATGG TAAGATTCTC ATGTCTGTCT ACATAGGAAT ACTCCACCGT	120
ACAGGACACT GCTTTCTGGG TTTAGTTCAT TGATAATTG TCCGAATGCT CATAAACATG	180
TCTATAGGAA TACTCCAATA TATCTAGGAC ACAGTTTTCT CCGCTCCTGA ATACAGGCAG	240
ATTTTGTTTC TTTCTGCCTC CCTGTGTTAA TGAGAAGGTA GTCCAGCAGG TTCTCTCTAC	300
CTCCTTGCTT TTTTTCCTCC TTAATGCTCG AG	332

(2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 340 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

GAATTCGGCC AAAGAGGCCT AACCTGCTCC GTGGAGCGCC TGAAACACCA GTCTTTGGGG	60
CCAGTGCCTC AGTTTCAATC CAGGTAACCT TTAAATGAAA CTTGCCTAAA ATCTTAGGTC	120
ATACACAGAA GAGACTCCAA TCGACAAGAA GCTGGAAAAG AATGATGTTG TCCTTAAACA	180
ACCTACAGAA TATCATCTAT AATCCGGTAA TCCCGTATGT TGGCACCATT CCCGATCAGC	240
TGGATCCTGG AACTTTGATT GTGATATGTG GGCATGTTCC TAGTGACGCA GACAGATTCC	300
AGGTGGATCT GCAGAATGGC AGCAGTATGA ATACCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 518 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

GAATTCGGCC AAAGAGGCCT AGGAGCTATA ATCTTGTAAC AGAGTCTACG TGATTGTAGG	60
ACAATAGGCA CCACACAAAT ATGAGGAAGC AGGTCAGAGA GCGGGCTGAC TTAATGATTA	120
ATGCTGAATG TGCTACAAGC TTGTTTCATT TTCATTCTC CTCCTCCCTT TTTTCCTGAT	180
TAATTTAATA AAGTTCATAG GGGAGGCTTC AAACACATGA GAAATTAAAA CCTTTATTAC	240
CAGAGTCAGA GCCTGACTAT ATTGATTGAG TGAAGCTTTC CTTTATAAAA TGCAAAGCAT	300
GTAAACAATT CCAACACAGT AACATATTCA TGAGTTTTTA AATTCATGAG TTTTAGAGAA	360
AATATTTTAC TTAAAACCAG CACTTGATGA TCTCTGACAA TGTTATGTAG CCTGAACCTG	420
GAGTTTTGGC TGATGGGTTG TCTCAGCCTG TGACAGGTTT TAGCTGGCTT TGGTTCATCT	480
TGTATCACAC CCCCACTC ACATGCTCAC CACTCGAG	518

(2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

GAATTCGGCC AAAGAATTCT AGACCTGCCT CGTGCGTAAG GCAATTGAAT CGAGGGTTAA	60
GGGTTTCATCT TGCTAATGTC AAAAGTGACA CTAACAAGAT TCTTAGCCTC ATCCGCCAGA	120
TGACGGGCCT CCGCTCGAG	139

(2) INFORMATION FOR SEQ ID NO:823:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGCC AAAGAGGCCT AAGATGAGAA AATCAAGGTT CTTAGATGTT CTGGAATTTG	60
TTTCATTTTCA CATGATTGGA ACATTGTGGT CTTGTCTTTC AAGTCCATGT CTACCATACT	120
CCACAGACCC TTTTCTGTCC ACTTTGTGAC CTATAATTCT GAACTCCAAT ATAAAGACTT	180
CACCGTATTT GAAAGAGAAT AGTGGGAAGT CTGATGCTCA ATTTTGTGTA CAGAACAGTT	240
GCCTCTGTGA CATTGTAACT GCTGAAATAA GAAATCCCC TTTTGATTCA GGAGCTCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:824:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC AAAGAGGCCT AAATCAGCAG TGAATCAGA ATCAATTGAG TGACATNGAG	60
TCAGTAAATC TCTGACTGCC TCAGTTACCC CATATGATAG TTTTGAGGAT GGGAACATTG	120
AGAGAGTTGA TTTGGAAGCA TATCAAGAGT AAAAATTCCA ACATTTTATG TTCCTTTAAG	180
TTAAATCCAG GCACTGTCTT TTCCTGCAAG TCTCCTGTTC CTTTCAGATT GCACAGGTGA	240
GAGTGCTCAG ATTAGGGCTG GAGGTTGTAA ACCATTGCTC CCGTCCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:825:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 545 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

GAATTCGGCC	AAAGAGGCCT	AAGCTTTTTT	TTTTTTTACA	GACTTCACAG	AGAATGCAGT	60
TGTNTTGACT	TCAGGTCTGT	CTGTTCTGTN	GGCAAGTAAA	TGCAGTACTG	TTCTGATCCC	120
GCTGCTATTA	GAATGCATTG	TGAAACGACT	GGAGTATGAT	TAAAAGTTGT	GTTCCCAAT	180
GCTTGAGTA	GTGATTGTTG	AAGGAAAAAA	TCCAGCTGAG	TGATAAAGGC	TGAGTGTTGA	240
GGAAATTTCT	GCAGTTTAA	GCAGTCGTAT	TTGTGATTGA	AGCTGAGTAC	ATTTTGCTGG	300
TGTATTTTAA	GGTAAAATGC	TTTTTGTTCA	TTTCTGGTGG	TGGGAGGGGA	CTGAAGCCTT	360
TAGTCTTTTC	CAGATGCAAC	CTTAAATCA	GTGACAAGAA	ACATTCCAAA	CAAGCAACAG	420
TCTTCAAGAA	ATTAACTGG	CAAGTGGA	TGTTTAAACA	GTTTCAGTGAT	CTTTAGTGCA	480
TTGTTTATGT	GTGGGTTTCT	CTCTCCCTC	CCTTGGTCTT	AATTCTTACA	TGCAGGGAAC	540
TCGAG						545

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 91 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

GAATTCGGCC	AAAGAGGCCT	AGGTGGTGGA	ATCAAGGCCA	TGAAGGACCT	GTTTATGCGG	60
TGCATGCTGT	TTACCAGAGG	AGGCCTCGA	G			91

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

GAATTCGGCC	AAAGAGGCCT	ACTAAGAAAT	GCTATTGGAT	CTTTAGTTTG	TTCAGCTTTA	60
TTTTTCTTAT	AAGGATGAAA	GTGTTGACTT	ACAAGCTCTT	TATATATCAG	ACCAGAAACT	120
ACTTTTTTAA	AAATATAAAA	TGTAATCACC	ATCTAAAGCA	CTTNGCACAA	TGCATGGCAT	180
GTAGTGAGCA	CATATTTTAA	GCTCTTACTG	TTATTTATTA	TTATTCCATT	GAGAAAAACA	240
TTTCCTAATA	ATAATGAAAT	GACAACATGA	TATGGTAGCA	TCACAAAAAT	CAATACATCT	300
TTCTAAACAT	ATTAGAAATT	ATTTCTGTAT	GAAATAACAG	GTTTAAGGAA	AAAATTTAAT	360
GTGGTCAGAA	GTGTGCAATC	AAAATAATGA	GATGACATTG	GCATGAAGAA	CAAACTCGAG	420

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC AAAGAGGCCT AGAATTCTAG ACCTGCCTCG AGCTTAGGGT GACAGAGTGA	60
GACTCCGTCT CAAGAAGCTAG AAGAGTCCTG AAGTTCTTTC TGGAGTATTG GTGTGATAGA	120
AGCATTAGTA GTTCTTTTAA TGTCTGGAG AACTTCTGTG CACATAAATG TTTATAGATA	180
TATACCCCGT TTGTATACCA AAGGAATCTT CATTATTTTT CACTGAACAA AACACCTTAG	240
AGAACATTTT GTTTGTTTTG CCAATCAATC TAATTCTTTT AAATGACCAC ATAGTATCCC	300
ACGGTAAGTT TTTTGTTTG TTTTNTTAA AATCATGATT TGTTAAACA TGTCTATTG	360
CTCTCGAG	368

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AATGTTTTTC AATACCTCAG TATATTGTAG GGACTTGTTG	60
AGAAGTTGTT GAATGAATAT ATTGTTTCTG GTTTACCATT ACTCAGTATT TTAGTTGTCA	120
CATCTTAAAA TAGATAATCA TTTTACCATT CACTCTCCCT TCATAAGATA TAGAAATAAA	180
GCCCTTCTTG TTTGGAAATG GTGGTATTTT GGTTTTACTT TTTTAAAGT TACTGTTGTA	240
AGGTACTACT TTAATATTTT TATTTAACTT TATTTGTTTG TCTTTAGTAG GACTAAGCTA	300
ATGAGAGCTT TGACTTGCTT AACGTTGGG CAGGAAACT CGAG	344

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGTCT AGAAGACTTT TGTATTTTTG ACTTTGCTAG TTTGTGGCAG	60
AGTGGAGAGG ACGGGTGGAT ATTTCAAATT TTTTATAGTAT AGCGTATCGC AAGGGTTTGA	120
CACGGCTGCC AGCGACTCTA GGCTTCCAGT CTGTGTTTGG TTTTATTCT TATCATTATT	180
ATGATTGTTA TTATATTATT ATTTTATTTT AGTTGTTGTG CTAAACTCAA TAATGCTGTT	240
CTAACTACAG TGCTCAATAA AATGATTAAT GACAGGATGG GGTCCCCTG TGCTTTTACC	300
AGTAGCATGA CCCTTCCTGA AGCCATCCGT AGAAAGTACC TTGTCCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GAATTCGGCC	AAAGAGGCCT	AAAACAAGAT	CCACTGGAGG	GTCATGTCTG	AGTTGTTCTC	60
TTGATGATTT	TGGCTGATTA	TCTTAATGCC	CTTTTCCATT	TCTGATGCTC	TTGTTCTACA	120
TTTTGGGTGA	AAATACCAAT	ATTTCTAATT	CTGTATCACA	TCATCTCACT	GTGTAGCAAG	180
GCAGGTCTCC	ACAAATTACC	CCGTTCCACC	TGGAGAGCTC	CTTATTGACT	TAACGTGATA	240
TTCAGCCAGG	TTTTTCTTCC	TGTAATAGTT	GCTTTGCCTT	TAGCAAATTG	CCTGGATCAT	300
TGACCTTTCT	TAGCCCATGC	ATAAAATGCC	AACTCGAG			338

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	AAAGAGGCCT	AATATTATAG	AACCACCATA	TGTACATTTT	TCATAGAGTT	60
TGGGAATGAA	ATAGTAAAG	GTATATAGAA	AAC TAAGAAA	AGGGAAAATT	CTGGGGGGCT	120
GGGATGAGGA	AGTGATTAGC	ACCAGGGAAA	ACCAAAGTTT	ATACCAGAAA	GGAAC TCTAA	180
TATTAGGCTG	CCATATTAAG	CCATGTGGCT	GGGCTACATT	GTGTTAAGTC	ACTGATGAAT	240
GATCTAAACA	AGAGTCTGGA	TATAACCAAA	TCAGGAAGGC	TTGAAGAATG	TGTGTGTTAT	300
TGGGGGGAAC	GGTGTCTACA	GTAGGAGGTA	GATGGTTATG	TAAAACTAGA	GAAAAGGAAC	360
TAATATAAAG	TGTTAGTTGG	AATATATTAA	TAATTGTCAG	TGAAAAC TCG	AG	412

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC	AAAGAGGCCT	ACTGTGGGTT	TATATTGATG	TGTAACAAGT	TGATTTGGAA	60
CACTGGACTC	TCATTCTGTT	ATTCTGGTTT	TGTTTTTTTT	GTTTTGTTTT	TTTCTTTTGG	120
TAAAGGCAAT	GAGCTAGTCC	CAGATCTCGA	G			151

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCAGCC	TTCATGGCCT	ACTCTCGTTG	AAGATGTGAA	TATCTGTCTG	CAGGCATGCA	60
GCAGTCTACA	CGCTCTGTCC	TCTTCCTTGC	CAGATGATCT	TTTACAGAGA	TGTGTTGATG	120
TTTGCCGTGT	TCAACTAGTG	CACCGTGGAA	CTCGTATTCTG	ACAAGCATTT	GGAAAAC TGT	180

TGAAATCAAT TCCTTTAGAT GTTGTCCGA TTGAATTCTA GACCCGCCTC GAG

233

(2) INFORMATION FOR SEQ ID NO:835:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 228 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCGGCC TTCATGGCCT AGAACTGGGA GGTAGAAACA AAAATGACTG AACATCTTTT	60
TATCCCCCAA TCGTTACAAA GCCTAAATAA CTCTAAACGG GATGGGAGGG CAAATTTTAG	120
GTCAGTTGAC ATCCTGGAGA AGATATCCTA GGTCTGTCT CATTCCCTAG ACCGCATAAC	180
ACTCCAACCG TGTAGCCAT GAAGATTGAA TTCTAGACCT GCCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:836:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 224 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCGGCT TCATGGCCTA GGCTGGTGAT CCATGATGCA AATAATAATA ATAATGATGA	60
TTTTTTTAA TGTACAGCTC TCACACAAAT TTCATTTTGT GAACACACTG GTAAGTACAC	120
GATGCTGGGG CTTCACAAAT GTGGCGTATC CCACTGATGG CTCCAACCTG CGAGTGGGCT	180
CAGTTATGAA AACTCGGGA GAGGACGGGT TGTCGCTGCT CGAG	224

(2) INFORMATION FOR SEQ ID NO:837:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCGGCC TTCATGGCCT AGGAGCTGTT GCACTTTGGG CCTTGGCAGG ACAAACACTA	60
AAACAACAAA AATATATGGC AGAACAAATT GGATACAGCT TTATAATAAA TATGCTTTTG	120
TCACCATCAG CTAAAATGCA GTATGTTGGT AAGTTATTTT CTTATTTTAA TTTTATTTT	180
TTAGAGACAG GATCTTGCTC TGTTGCCAG CCTGGTGTGC AGTGGCACAA TTATAGCTCA	240
CTGCAGCCTC AAACCCCTGG GCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:838:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 514 base pairs
 - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

GAATTCGGCC	TTCATGGCCT	AATCAAATC	AACTACGCC	CTGATCGGCG	CACTGCGAGC	60
AGTAGCCCAA	ACAATCTCAT	ATGAAGTCAC	CCTAGCCATC	ATTCTACTAT	CAACATTACT	120
AATAAGTGGC	TCCTTTAACC	TCTCCACCCT	TATCACAACA	CAAGAACACC	TCTGATTACT	180
CCTGCCATCA	TGACCCCTGG	CCATAATATG	ATTTATCTCC	ACACTAGCAG	AGACCAACCG	240
AACCCCTTC	GACCTTGCCG	AAGGGGAGTC	AGAACTAGTC	TCAGGCTTCA	ACATCGAATA	300
CGCCGCAGGC	CCCTTCGCCC	TATTCTTCAT	AGCCGAATAC	ACAAACATTA	TTATAATAAA	360
CACCCTCACC	ACTACAATCT	TCCTAGGAAC	AACATATGAC	GCACTCTCCC	CTGAAGCTCTA	420
CACAACATAT	TTTGTCAACA	AGACCCTACT	TCTAACCTCC	CTGTTCTTAT	GAATTCGAAC	480
AGCATACCCC	CGATTCCGCT	ACGACCATCT	CGAG			514

(2) INFORMATION FOR SEQ ID NO:839:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

GAATTCGGCC	TTCATGGCCT	ACTACATAGA	CGTGGATTTT	AGGGGGACAA	AATTCAACCA	60
CTACCGTCTC	TTTGCTTGAA	ATCACACACA	ATTTCAGAG	GCCTAGAGAT	GCCACTTTGT	120
CCGCAGATCT	CTTCTGGCC	CCGCCTCTGT	CTGGGCAGCC	TGGGTCTGAT	TGTCCTTCTG	180
TCTGCCACCC	TCACAGTCCT	CAGCCGTGGC	CTGGTTCCTG	TCCTGGGGGC	TGACCAGCCT	240
TCTGGGGCCT	GGGACCTGGG	GCATCGCTGC	TGCCTGCCGG	CTGACCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:840:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 221 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

GAATTCGGCC	TTCATAGCCT	ACCTAAATTA	ATAATAATGT	ATAGTTCAGA	ATTGCTAAGA	60
GTACTTTTTT	TTTTTTTTTT	TTGAGACAGG	TTCTCGCTCT	GCCCTCCAGC	CTGGTGACAG	120
AGCAAGATTC	CATCTCAAAA	AAGAAAAAAA	ACACACAGCT	AATAGAATTG	CCATTGTTTT	180
TCATAATAGA	ATCTAGCTGC	TTACTCCAAC	CTCACCTCGA	G		221

(2) INFORMATION FOR SEQ ID NO:841:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTCGGCC	TTCATGGCCT	AGTAAAGTTT	CTCTCACCCC	ACTTTAATTT	CATGTGCCAC	60
ATTTTTTCCT	TTCTGAAACT	ATATTGCTTC	CCACATTCGG	ATTTTAGAAT	TTTCTTTTTT	120
AAAGAGATTG	TATTTTAAAT	TATATTTGGC	CTACTTCCCC	ATTGTCAATG	CTTGACCGT	180
GTGAGAAGTC	CCTAGGATGA	TAGTCATGGT	TTTTTCCCAT	CTTATTAGCT	TATTATTCTC	240
CTTGCCCAAC	CCCCACCCCT	GGCAGCTTCC	CACCCCTCTCT	AATGCTTCTG	GAAGCTACTA	300
AGAAGTTTAA	GTGGCCTATG	TGAAAATATG	TCAGTGTCCT	ATTTTAGCAT	ATATATGTAA	360
CATTTACAAT	TTATACCCCT	GCCTACATCC	GAGAGGGTTG	TGAGGTGGCT	TATGATGATA	420
AAGAAAAAAA	CCCACATATC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GAATTCGGCC	TTCATGGCCT	AAATTTATAA	GGTACTCTTT	AACAATTTAT	ATCAGAGTTA	60
GTTGCTATCT	TTAGCACCAT	TGTCCTGATG	GCCTCCACTT	CTAGCTATAC	ATTGCCTCTT	120
TGAAATGAGC	CATTGCGGAG	GCAAATATAT	CAATTAGAAT	GCCTTTAAGA	ATAAAAAACT	180
TAAAAAGCAA	AGAAAAACAG	AATGCCTTTA	GGAAAAAATT	TAATAAAACC	AACTCAAAAT	240
TGTGCAACA	AGGAAATTTT	AGTGTTCCTC	ATAATAAAAC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

GGTTCCCAAG	TAATTATATT	CCAAGGAACA	TAGGAGGGGC	AAAAATAATT	CTAAAGACAT	60
AAAGAAAGAA	ACAGGATATT	TTCTAAATAT	TTTTATCTTG	AGACAGAACT	TGGTTTTTTT	120
TTTGCGTTTA	GCTTGGAAAA	TCTCGTGTCA	TAGATAAATC	TTTCTCCTAT	CTTGAAATTG	180
GTCTTATCAA	GGAACCTACC	GCATTGAGAT	ATGAAGCTCT	GGGCCTCTCT	GGTAGCCTTG	240
CACACCCTTC	ATTCATCACC	TGGTCCCCCA	GATAAGACAG	CCCTGACCTC	AGAATACACC	300
TTGGATTTAA	CATTCTATGG	GACATTTATT	TCTAGTCTAC	CCCCATCCCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

GAATTCGGCC	TTCATGGCCT	AGTGGAAAAA	ATAAGATATT	TCTTAAAGTA	ACAAGGCCTG	60
AATAAAATGTG	TGGCAGTCTC	AAATTCTATT	CTATATCTCA	GGTGTAATCC	TTACATACTA	120
AAGATAGTGG	GATCATCCTT	GATAGTTTCT	AGCAGACTGG	TACATTAAAA	AGTGACAATG	180
TTTGGGGTAT	GACAGTATAA	AAAAAGGTTT	AATTTGAGAA	AAAGGATTAA	GTTAAATAGT	240
AAACTTAGTG	TGAGATTTTA	ATCACAAGTA	CAAAAGAGTG	AAGAGCAGCC	TTCATGACAA	300
GGAATCATGT	GACCAGCCCC	CACCCCAAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

GAATTCGGCC	TTCATGGCCT	AAGAAAGGGT	GGGAACTAAC	ATTGATCACA	TTTATGGAAA	60
CCTGCCTTCT	CGTGCTGGGC	ACTTTATATA	TGTTATCTCC	CTTTGTGGTG	CAATCTCATG	120
ACATGCAGTC	ATTGTCCATG	TTTGTGGGTG	AGGAAACAGG	CTTAGGGGTG	GGAGGCTCGC	180
CTGAGGCCCC	ACACTGTTGG	CTGGAGACAG	CGTGGGGCCT	GAGTCTTGCT	CACAGCCTGA	240
ACGCTGCACT	CTGCTGCTCC	GCGTCCCAGG	AAGGAAAAGC	TGCTGCAGTG	GGTTTGTTTT	300
GCCAAATACA	TGGAGGCTTT	TTTCTGGGTG	AGTGCCCAGC	AGTTGATTGT	TCTGTATGCC	360
TCGAG						365

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

GAATTCGGCC	TTCATGGCCT	AATCCATGTT	GTACAACTGA	AATATAAATA	ATTTTGTCAA	60
TTATACCTAA	ATAAACTGG	AAAAAAATTT	CTGGAAGTTT	ATATCTAAAA	ATGTTAATAG	120
TGCGTACCTC	TAGGAAGTGG	GCCTGGAAGC	CATTCTTACT	TTTCAGTCTC	TCCCATTCTG	180
TACTGTTTTT	TGTTTACTT	TCGTGCGCTG	CAGGTCTAGA	ATTCAATCG		229

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 575 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

GAATTCGGCC	TTCATGGCCT	AGGGGAGAGT	ATCATCTCAC	CAAAGGTGAA	AATGGCATT	60
CGGACATCAG	GACATCTCTT	ACTGGGAGTA	GTTTGAATCT	ATCACAGGAA	AGCCAAATAC	120
CTTCTTGAG	ACTGTAATGA	AGCATTTCAT	AAGATAAAGA	TGGCTTTTCG	GCCAGGTGTG	180
GTTGACCTGC	CTGAGGAAAA	TCGGGAAGCA	GCTTATAATG	CCATTACTTT	ACCTGAAGAA	240
TTTCATGACT	TTGATCAGCC	ACTGCCTGAC	TTAGATGACA	TCGATGTGGC	CCAGCAGTTC	300
AGCTTGAATC	AGAGTAGAGT	GGAAGAGATA	ACCATGAGAG	AAGAAGTTGG	GAACATCAGT	360
ATTTTACAAG	AAAATGATTT	TGGTGATTTT	GGAATGGATG	ATCGTGAGAT	AATGAGAGAA	420
GGCAGTGCTT	TTGAGGATGA	CGACATGTTA	GTAAGCACTA	CTACTTCTAA	CCTCCTATTA	480
GAGTCTGAAC	AGAGCACCAG	CAATCTGAAT	GAGAAAATTA	ACCATTTAGA	ATATGAAGAT	540
CAATATAAGG	ATGATAATTT	TGGAGAAGGC	TCGAG			575

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

ATCCTGGAGT	GCAAAAATAA	AATCCACTCA	AGAGTCACAA	GGCCCGCTGT	GCATAATCGG	60
TTTCACTTTT	ACCTTTTTTT	TTTTTTTTTT	TTTTNGAGAC	AGGTCTCACT	CTGTCACCCA	120
GGCTGGAGTG	CAGTGGCACA	TTCTCGGCTC	ACTGCAATTC	CGCTTCCTGG	GTTCAAGTGA	180
TTCTCCACC	TCAGCCTCCC	AAGTAGGTGG	GATTACAGGT	ACTCACCACC	AGGTCCAGCT	240
AACCTTTTGA	TTTTTAGTAG	AGACAGGGTT	TCACCATGTT	GGCCAGGCTG	GTCCTGAAGT	300
CCTGACCTCA	GATGGTCTGC	CCACCTCCGC	CTCCCAAAGT	GCTGGGATTA	CAGGCGTGAG	360
CCACTGCGCC	CGGCCACTTT	CACACTTTT	ACAGTGAGTG	GTGAATTAGC	AACAGTAACA	420
CTGATTATCC	AACATATATT	TTGGAATATC	TACTATGTGC	AAGGAATTTT	TCTTAAACTC	480
TAAGGTTATG	AATCACTGGG	CAAATCCATA	TAATTAGAGA	ATTTTAAGTG	CGTCTCGAG	539

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

GAATTCGGCC	TTCATGGCCT	AGGGGGAAGA	CGGGAAGCAT	ATAAATAAAC	AAATAATTTT	60
TAAAAGCAAC	TTTTTTAAAG	CAAGTGGGAG	GGGCATGCTA	GTTTAAAGAA	CTGTAATAAA	120
AAACACCACC	CATTGTTTTT	TTTTTGTTTT	TTCTTTTTTG	AGACAGAGTC	TTGCTCTGTC	180
ACCCAGTCTC	GAG					193

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCTAGA	CCTGCCATGG	CTGTGGGCGC	GCTCCCCTCT	GA CTGCGTCC	CCTTCTCTCC	60
CTGCATCCCC	TTCTCTCCCT	GCATCCTTCT	GTCTTCCTGT	GTGCCCTTAT	CTGCCTGGGC	120
CTTCCTGTCT	TCCTGTATCT	TCTCACCTGC	CTGTGTTGTT	TCTAGCTGTG	TCTCTGCCCT	180
TCCCTGTGTC	ATCATGCCCT	TCTGTGCACT	CCTGTCTGAC	TGTGGCCTCT	TGCTTTCTTG	240
TGTCCCAGCA	TCCACCTGCG	TCTTCCTATC	TGCACGTCCC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GAATTCGGCC	TTCATGGCCT	AATCTCGTTC	TCCATGTCTT	CCGTGTGCTG	GATACACTGG	60
CAGAGCTCAC	AGATGAGAAA	CGCCCCCAGG	GTGGCCTCCT	CGTGGTTGTC	CTGGATGTCC	120
ACATTGACCA	CGTGACAGG	CTGGCAGGTC	TCCTGTTCTC	TGGAATTCAG	ATCTTCCACC	180
ACCTGGTCAT	ACACTCTCTC	TTGCAAGTG	AGGATCAGAT	CAAACAGGTC	TTGCAGTTC	240
TGGAATCTTT	CTGGCCGGGG	CTTGATTCTC	TTATTTCTGT	CCAGCATATG	TAAAAATCCCA	300
TTCTGTGTAT	AGAGTTCTTT	GTCTTTCCTA	AGAAGATCAT	TGTACATCTG	GTCATATGTG	360
GTTTGTAAAT	CATAAACATT	GGGCTTGTCT	GGAGCTGGTC	CTGGAAGCTT	CACGTGAGTC	420
CCTGTTCCAA	AGGATCGGAC	GCTGAATCCC	CGTTTGCTGA	GGATGTTGTG	CGCCTCCATG	480
CTCCGGTTCT	GGTTGCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCGGCC	TTCATGGCCT	AAGTTGTGCT	GACACCAAAC	ACATCCAGTT	TATAATCAGT	60
ATATTGGAAA	GCTGGTATTG	ATGTAGAACC	AGTGCATAAC	TTTTTATGGG	GTTTTGTTAT	120
TGGTTTTTTT	TTGTAAAGTG	TGAATAAAAG	GTATGTTTAC	TCATTTTCC	TGAACACTGT	180
GTTGGTAATG	TGCATCATGA	CAATTTCCAG	TGAAGGTGAG	CTGGAGCTGG	TTGGACTAAT	240
GAGACTGAGG	AAGCAGCTTT	TCCTACGATC	TGCATTATGT	AATCACAGGT	CCAGAGAGCT	300
TTATGGAAGC	GGGAGAGGAG	GAGCACTTAC	TCATGTTGTA	TTTGTTAATG	GAGGATGTCA	360
TCTTTTCATA	GATGCTGGAA	CTAGAGTGCA	CTTGTTAGAT	GCTAAAGGTT	TGAGCTTTAC	420
ACAAAATGTC	TTCATCTGTA	TTTGTTATTG	TCTACAATAT	ATTTGAATTT	GGGGCAAGTC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 746 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

GAATTTCGGCC	TTCATGGCCT	AGGTGGCTGC	ACCATCGGGA	TGTCCTGATC	CAACATCGAG	60
GTCGTAAACC	CTATTGTTGA	TATGGACTCT	AGAATAGGAT	TGCGCTGTTA	TCCCTAGGGT	120
AAC TTGTTCC	GTTGGTCAAG	TTATTGGATC	AATTGAGTAT	AGTAGTTCGC	TTTGACTGGT	180
GAAGTCTTAG	CATGTACTGC	TCGGAGGTTG	GGTTCTGCTC	CGAGGTCGCC	CCAACCGAAA	240
TTTTTAATGC	AGGTTTGGTA	GTTTAGGACC	TGTGGGTTTG	TTAGGTACTG	TTTGCAATTAA	300
TAAATTAAAG	CTCCATAGGG	TCTTCTCGTC	TTGCTGTGTT	ATGCCCCGCC	TCTTCACGGG	360
CAGGTCTAGA	ATTCAAAAGC	AAGCATCTCC	GCATCGCATC	CTCTTCCATT	AACCAGTGGC	420
CGGTTGCCAC	TCTCCTCCCC	TCCCTCAGAG	ACACCAAAC	GCCAAAAACA	AGACGCGTAG	480
CAGCACACAC	TTCACAAAGC	CAAGCCTAGG	CCGCCCTGAG	CATCCTGGTT	CAAACGGGTG	540
CCTGGTCAGA	AGGCCAGCCG	CCCACTTCCC	GTTTCCTCTT	TAAGTGAAGA	GAAGCTGATC	600
CAGTTTCCGG	AAACAAAATC	CTTTCTCAT	TTGGGGAGGG	GGGTAATAGT	GACATGCAGG	660
CACCTCTTTT	AAACAGGCAA	AACAGGAAGG	GGGAAAAGGT	GGGATTCATG	TCGAGGCTAG	720
AGGCATTGG	AACAACAAAT	CTCGAG				746

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

GCAATTCTAG	TGGTAAGGTG	TTAATAATTT	CACTCTTTTT	ATGTAGACGA	GAGGTTGAGC	60
CTTGAAGGAT	GAGAGGTGTT	TACCGTCTTA	GGATGGGGTA	TAGTAGATAG	AACCATATGA	120
ACCGAAGAGC	TGAGGAATGT	GAGCATGTAA	CACCTGACGT	GTACAGTAGT	AGGTATGAAG	180
TCATATGGGA	GCAGTATTTT	TTTTTCTATT	TTGTTCACTG	ATTTTTCTCC	ACTGGTACTT	240
AATAGGCACT	CAATAAATAT	TTTGCTAAAT	AAATGAAGT	GTGATGTTGA	AATCCAGTTA	300
GTTTACATTT	TGGTTGGTTT	TGGTATTGTC	TTTTAAAGGT	AGCAAAGACC	AAGTAATTAA	360
ATTTGTTAGA	TGAATATGAG	ATAAAATGGG	CTCTCGAG			398

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

GCCCTTTGCT	CCATTTCCAA	GGAAAGAAAT	TAAACCAAGA	TGGTGGCTGG	GATTACAGGC	60
ATGAGCCACT	GTGACCAGCT	CGCAAGATAG	AATTTTGA	AATGTATCTT	GAGCCTCTCT	120
TTCTCTTTCT	AGTTCTTTAA	GATTCAAGAA	ATCAAATAAG	GTGATAGCCC	TGAAGCCCTT	180
ACAGGCAGAG	GTGCCCTCGA	CTGTGGGTGA	GGAGGTATTC	ATCCCCAACC	AGTGAGATAT	240
TCTGAGTGGG	GAGAAGTGTT	TTCTATCGAT	GACACAGGGT	GGGCCCTATG	GGAGCAGCAG	300
CATGGCCCCA	CCTTCGACCC	AATGCTGAGA	GGAAAGGGGC	CTCAGGAAGG	GGAGACTGAA	360
GCCAGCACAC	TCGAG					375

(2) INFORMATION FOR SEQ ID NO:856:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

GAATTCGGCC	TCATGGCCTA	TGAATTTATT	TTATTTTACT	TATTTATTTA	TTTGGTAGAG	60
ACAGGGTCTC	ACTATATTAC	CCAGGCTGGT	CTCTTACCCC	TGGCCTCAAG	TGATCCTCCT	120
GTCTCTGCAT	CCCAGGCCTC	CCAAAGTGGT	GGGATTACAG	GCATGAGCCA	CGATGCCTGT	180
CAGCCTTATT	GCACTTCACA	CACACACACA	CACACACACA	CACACACACA	CACACACACA	240
CACACACTGA	TTCAGGCCTT	GAGAGTCAAG	CCCAAGAGCT	CCCTTGGCC	TGTTCCCCAC	300
TCTCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:857:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 564 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

GGAGAAATAT	GGCTTCAGTT	TTTCATTACT	TCCTGTTAGT	TCTGGTCTTT	CTGGATACAC	60
ACGCAGCTCA	GCCTTTCTGT	CTGCCAGGAT	GCACTTGCTC	AGAGGGAGTT	TTNGCAGGAC	120
TCTGCAGTGC	ACATCTGTCT	CCTTGGGAAA	GATCCCTGGG	AACCTTTCTG	AAGAGTTCAA	180
GCAAGTGAGA	ATTNGAAAAT	TCNACCNTTA	TTTGAGATGC	CCCAAGGNTC	TTTCATCAAC	240
ATGAGCACCT	TGGAATACCT	CTGGCTCAAT	TTTAACAATA	TCAGTGTGAT	CCACCTAGGA	300
GCCCTGGAAC	ACCTGCCAGA	ACTGAGGGAG	CTGAGACTGG	AGGGGAACAA	GCTCTGCTCA	360
GTACCATGGA	CAGCGTTCGG	TGCCACCCCT	CTCCTGAGGG	TCTTGGATCT	CAAACGCAAC	420
AAGATTGATG	CACTCCCTGA	GCTGGCTCTT	CAATTCTTGG	TCAGCCTGAC	CTACCTTGAC	480
CTATCCTCCA	ATAGGCTTAC	AGTTGTATCC	AAGAGTGTCT	TCCTGAACTG	GCCAGCCTAC	540
CAGAAATGCC	GGCAGCCACT	CGAG				564

(2) INFORMATION FOR SEQ ID NO:858:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 680 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

GAATTCGGCC	TTCATGGCCT	AGGTGGTTTG	GAGTCATAAC	ACAGAAGTGG	TGAGAAGTGA	60
TCAGAGGCGG	ATTTCTTGGT	GCATTGAATA	TGGGATGTGA	GATAAGCAGA	GGAGTCAGGA	120
TGGCTTCCCG	GA CTATGGTC	CAAACAGTGG	AAAGGATGCA	GTGGCTGTAA	CCTGAAGCAG	180
GAAGTCTGCA	GGTGGGACAG	AAATGTTTGT	TAAGGGAAGT	GTTTTCAGAG	TTTGGTTTTG	240
GATATGTAA	GTTTGCCAGT	GTAAATGGAC	ATACTGTGTA	GACATTTGGA	AATATGAATC	300
TTGGAAATAT	GAGGTTCTGG	GTATGAGCAG	AGTCCAAGGA	TGAGCCTAGG	GATTGGAGAG	360
CTGAAACCAG	AAAAAGAAGC	TAGAAGGAGA	GGCCAGTTAA	GACAGTGAAA	AGAAGCGAGG	420

CATGAGGATC	ACTTGAGGCC	AGTAGCTCAA	CAGCCTGGGC	ATCATAGCGA	GACCCGTGCT	480
CAGCAACAAC	AACAAAACGG	ACAGTGAAGA	GAGTATTTGA	AGGAGAGGGG	AACAGGCAGC	540
GTATTGCTTA	TTGCTGAGGG	GCAAAGTGAA	GACCAAGGAT	AGACTGCTGG	GCTTGACAGC	600
ATGGAGGGTG	CTGGGGGCCT	AGGCAAGTGC	AATATTCATG	TGGTGTCAAT	GGGCCAAAGG	660
TGTCATTGGA	GGTACTCGAG					680

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

GCAAAAGCAA	GTCACGTGGT	CATGCAGGGC	CTCAGTAAGC	AAGAAATATT	TACCCGCCCG	60
GGGATGGACA	GGTAGGAAAG	GGTCTGTAA	GGAAGGGCAG	CAAAATTTTG	GATAACAGTA	120
CTATGTGTTT	GTATGGAGCG	ATATTTAAGA	AGGTTTCCTA	GGTTTTTTGA	GGGGTATTGA	180
AGCTGAGAGG	TTGGGGGCAG	GCAGGAAGCT	CTGCAGCCTG	TAGCCTATGG	TATCAAGCTT	240
CATGAGAACG	AGAATTAACT	AGTTACATCT	TTATTACCAT	TTTTGGCATC	TCTGCAGACA	300
GTGGATCTAA	TGCATGATAG	CTGATTAATA	AATGTTTGTT	GAATTAATGA	ACAAAATAGC	360
AAGAAACACG	TGTTCTCGAG					380

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

GATTTTGAAT	ACACNACNAA	GTTAGAAGAA	TCTTATTACT	TAGATTCCAT	TAATATCTTA	60
CTATGTTTTA	TTACAAATCT	ATGTATCTCT	CTAGCCATCC	TTAATCCAT	GTTATGTTTT	120
TGATGCTTTG	CAAAGTAAGT	TGCGAATATT	GGTTCATTTT	CCCTGAAATA	CTTAAGCATG	180
CAAATCATGA	ACCAAGTTCC	AATATTTGTG	TGAAATGCAC	AAATAAGTGT	AAATTTGCAG	240
AGTTTGGGCA	TATGCGTATA	CCTATCAAGA	CACGGAGCAT	TAATATCACC	CTGGAAGTCC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

GAATTCGGCC	TTCATGGCCT	AGTGAACAAG	TAAAGACTGA	ATGGGGCTGA	GATGAAGGCA	60
ATGTTTCCAA	GGAAAGGAAA	TGTTATGAGC	AAGAGTGTGA	GGCAAGAGAA	GCTGGAACCA	120

CATTCAGAGA GTATCCTGTA GATTGCTCCA CCTAGAATCT CAGGTGGGTG GAGCAGTGGT	180
GGGAGAAGAC TGGAAAGGTA AGTTGAAGGT AAGGAATGTG TGGTGGGCCT CAGATCCCAG	240
GCTCATTCTT CAAATCACTT CTTACTTCCC TCACTTATCT TTGTTTAAAT AAGGTTAGCA	300
CACTCACTCG AG	312

(2) INFORMATION FOR SEQ ID NO:862:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

GAATTCGGCC TTCATGGCCT AGTGGCGGGC ATCTTGTGTT TATCTTCTGG AGTGAAATAT	60
GCTTTTCCAG TTGTCTTCGA AGTTTCACCT CTGCTCCATA TTTTCCAGTG GTCCCCTTGT	120
CAGCCAGAAT GAAGTGGGAA TGCACTGCTGT TGAGAACAGT GAGCTTGCTC ATGGGATTGG	180
ACATGGTCTG GTATGGCCGG ACAACATCTC TTCCAATGAG GTCCTCCTGG TTTTCCACAA	240
TTCCCCAGGG GGCAATACCT ATGGTGCATA TCTTCTCTCG AG	282

(2) INFORMATION FOR SEQ ID NO:863:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 388 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

GAAATTCGGC CAAAGAGGCC TAGGGTGCCT GTGGTTCCGG CTACTCGGGA GTCTGAGGCA	60
GCACAATTGC TTGAACCTGG GAGGTGGAGG TTGCGGTGAG CCAANATGGT GCCACTGCAC	120
TCCAGCCTGG GTGACAGAGT GAGACTCTGT CTCAAAAAAA AAAAGACCTT CCTTAATAAG	180
TGGAGTTGGA TAGACATTTT GCTTTGGAAA ACAGAAGCTA TTTACTGTCA ATATTAGGTC	240
TACTTCATTG ATTTACAGAG ATAGGCAAAG ATGTCTGGGG CTTTGCTCAC TAGGGAATTC	300
TGGCCATGGC CTTTGTCTTC TCTTCTAACC AGGCCTTTTG CTTCTCTTCT CCCTTTTTCG	360
CAGATGTAGA ACCACCAGGC GACTCGAG	388

(2) INFORMATION FOR SEQ ID NO:864:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 115 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GAATTCGGCC AAAGAGGCCT AAAGTTTCTA AAGATTGTAA ATTTAAAGG AAATGCCAAA	60
TGAATTATTT GTAAAATTGT TTAATAAATAA TGAGTGCGCC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:865:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTCGGCC AAAGAGGCCT AGATTGAGAA TGCTGACTCG CCTAAAAGCT TTATGCTTAT	60
CATGTCCTGTG GTGCTTGGAG CCTGTGGCCC AGGTGATTG GGGTTTGGGG ACGCCTCATG	120
GGCAGAGACG GCTCGAG	137

(2) INFORMATION FOR SEQ ID NO:866:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 622 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTCGGCC AAAGTAGGCC TAAAATCCGT CCGGNAACTA TGAACAATGG CAGCTACAGC	60
GTANTCAGCT TCAAGGAGCA ATGCAGCAGT TTAACCAGAG ATTCATTTAT GGGGAATCAA	120
GATTTATTTG CTACATCACA AAGTAAAGAA TTTGATCCTC TTGGTCCATT GCCACCTGGA	180
TGGGTCAATT AAATGAAAAG CCCTTACCTG AAGGTTGGNT TTTNAGATTG ACAGTGGATG	240
GAATTCATA TTTTGTGGAC CACAATAGAA GAACTACCAC CTATATNGAT CCCCACACAG	300
GAAAATCTGC CCTGTAAGTT TTCTAAACAT TGTAAGTTAA GAGTAAAATA CTAGTCCTTC	360
AGATTTTGAT ATAAAGATTT GTATTAGCAA GGAGTGGAAG TCTTAGTATT TCTTGAGTTA	420
GCTTGACAAT AGGTTTCTGT TCATTAAGTA TTTTGCATTT CCATCTCCCT CTTGGATATT	480
TTATCCTAGA GATTTTCATA TTTGTTACCA TTTGTTTACA CAGCACTAAA TGAACTATT	540
TAGAATTTAT AGGTATTGTA CTGCTTACCA ATTAGTCTCT GATTTCTGAT TTTTCTGCTC	600
TTTCATTCCC TNAACACTCG AG	622

(2) INFORMATION FOR SEQ ID NO:867:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 453 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

GAATTCGGCC AAAGAGGCCT GGCAGGCGTG TTTATTGACT CTTCCAATTA ATTTTAAAGA	60
ACCTGAAGAA ATGGACAAAG ACAGAGAAAA GNCNACCAGA TGTGATTCCG CCCTTCCAGN	120
AAGCAAAGAG CTTATTTTCAT CCCATATGAT CGATGCCAGT CATGGGGANG AGTGGCTGTG	180
TGGAATTAAT GGATTTTCAA CATCCATCAC AGAGGACACA CATGTATATT AGCNAGTCTN	240
AAACCTCTTA AATAAACTGC ATTGCTTTTC ATTTTCACTT CCAGTTATAA AACCAGTGGA	300
TGATGNAAAG GCCATGTGAC NATACAGCAT GTACTCTCAG GNATGTTTGT GTGACAGGGA	360
TATTATATCT GAAGGGACAG GGCAACTGGG AGGGTGAAGT GCTCATAACT CTCAATTGTC	420
CAGGTAATGA AGCATTGGGA AAGCGACCTC GAG	453

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 642 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

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GAATTCGGCC AAAGAGGCCT ACGAGCACCT CCGCCGCGCG CCTCCTCCGC CGCCGCGGAC      60
TCCGGCAGCT TTATCGCCAG AGTCCCTGAN CTCTCGCTTT CTTTTTAATC CCCTGCATCG      120
GATCACCGGC GTGCCCCACC ATGTCAGACG CAGCCGTAGA CACCAGCTCC GAANTCACCA      180
CCAAGGACTT AAAGGAGAAG AAGGAAGTNG TGGAAGAGGC AGAAAATGGA AGAGACGCCC      240
TGCTANCGGG AATGCTAATG AGGAAANTGG GGAGCAGGAG GCTGACAATG AGGTAGACGA      300
AGAAGAGGAA GAAGGTGGGG AGGAAGAGGA GGAGGAAGAA GAAGGTGATG GTGAGGAAGA      360
GGATGGAGAT GAAGATGAGG AGCTGAGTCA GCTACGGGCA AGCGGNCAGC TGAAGATGAT      420
GAGGATGATG ATGTCGATAC CANGAGCAGA AGACCGACGA GGATGACTAG ACNGCCAAAA      480
AGGGAAAGTT AACTNAAAAA AAAAAGGCCG CCGTGACCTA TTCACCTCCA CTTCCCGTCT      540
CAGAATCTAA ACGTGGTCAC CTTGAGTAG AGAGGCCCGC CCGCCCACCG TGGGCAGTGC      600
CACCCGCAGA TGACACGCGC TCTCCACCAC CCAACTCTCG AG                        642

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(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

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GAATTCGGCC AAAGAGGCCT ACTCCTCCTC TTCGGTCTCA CCACAACCCA CCCTATCAAA      60
ATACTGCACC TCCACACAGC CGTTCTCTT TCATTGGGAA AGGCCAGCAC CTGGCCTCTT      120
TCTCTTTGAT GCTTTTGTA AATTGAGTTT GGGGAGAGCG TTCCTGGTCT TTGTCCTAAA      180
CCAGTGAAGA CAAACAGTGT ACTTGGTGTA AGCAGACACT GAAGGTTTGT CTAAGCTGTC      240
AGCCTGCTCT CCCAACACCT GTGCCTGTGC TGAGACCTGA TGGTCCAGGA AAGGGCAGCT      300
GCCACACTGT GGATCCCCCG CCACCCACAC ACGCACCCCC CCTCGAG                        347

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(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

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GAATTCGGCC AAAGAGGCCT ACAGAGAAGC GGGGCGAACT GAGGCGAGTG AAGTGGACTC      60
TGAGGGCTAC CGTACCGCC ACTGCTGCGG CAGGGGCGTG GAGGGCAGAG GGCCGCGGAG      120
GCCGCAATTG CAAACATGCG TCAGAGCAGA GACGGCGGAA ACCCGTTTCG CGAGCCCAGC      180
GAGCTTGACA ACCCCTTTCA GGACCCAGCT GTGATCCAGC ACCGACCCAG CCGGCAGTAT      240

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GCCACGCTTG ACGTCTACAA CCCTTTTGAG ACCCGGGAGC CACCACCAGC CTATGAGCCT 300
 CCAGCCCCTG CCCCATTTGCC TCCACCCTCA GCTCCCTCCT TGCAGCCCTC GAG 353

(2) INFORMATION FOR SEQ ID NO:871:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCTTAG TTTGTTTTCA ACTGGAAAAT ATATAGAGAA AGATGAAGGG GCATTTTTCG 60
 CTCTACTCAT CAATTTTGG TACCAAATTT CTAAAAAACC AGATGGTTTA AAGAAAATTT 120
 TTCCAAAAAT TATGTTAACA TTCTGCTCAG ACATGGCTGC TAAAAAATA GCATATACAC 180
 ATATAATACT GAACAGCTTC TGCAGTGCCT GTAAACTCTC AGCTCATTTT CTCTTCTAA 240
 ANAAAAATATA TATTATAACT GATCCCAGAA CTCAATCTCT ATTGTGCAGC AGTATCAAAG 300
 GTCCTTAAAT TCTCAACAAT GAAGGAAAAA CAAAAACCCA TTCCCGGAC CGCTTGAGCA 360
 GGACTAGGGA AGGAGGAGTC CGTGGATGCA AAGGTTCGCT GCCCGGACGC CTCAGANTC 420
 CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:872:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCC AAAGAGGCCT AGGGAGGGCT GAGAGGGAGG GAGGGAGGAA GGAAGGAAAA 60
 AAGGAACAAA TGCCGCCTGA CCGTCTTTG TGGAACTACT ACACCTATGA TGAGTACCTC 120
 CATGGACCAT GCACCTGCCT TGAAACAAGG AGGCACAGCA CACAGGGCCC TCAGCTAGAG 180
 TGACAGGGAA AGGCGGGTGG ACATGGGGAA GGCTCAAAC CAAGCTTTGA AATCGGGGAA 240
 AGCCCCGAAA TCTGAACCAC TCTTGGGCCC ATCCTTCTCT CTCCACATT CACACCTTCG 300
 CCTGCGCTCC CATAATTGCA AATTAATTCA TCCACACATT CACACATTCT CTCCTCCCA 360
 CTCTCAANAG GCAGCCCCAA GCCCGGGGGC CTCACGAAGT CTGGGTGGAT GACCAAGCTC 420
 CTCCTCGAG 430

(2) INFORMATION FOR SEQ ID NO:873:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 606 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC AAAGAGGCCT ACGGGCATGG TGGTAGCTCA GGAGTTCAAG GCTACAGTGA 60
 ACTATGATTG TGCCACTGCA CCCAGCTTCA GGTGACAGAC AGTGAGACCC TGTCTCTAAG 120

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AAATAAATAA AAATAAAAAA TAAGAGGAGC TTTTGGAAATT CAGCTATTAG GAAGTTACTG      180
GTGCCCATGG AGGGAAGTGT TCCAGGCAAG TGGTGGTGTT AAAGGTNGAG AGAAGAGACA      240
TTAGCTCAGT GCTTCCCAA TAGGATANCC AAGGCGCCAA GCTGCANACT GATCTCAGGT      300
GTGGCCANT GCCTCCCCCT CAGCTGGAAC CCCAGACCAG ACTCCTGCAG TTTCAAGCAG      360
CCTCCTCCTT CTATCCCGGT GTACCTTCCA TATCTCAGTT CCACCACGGG GAACCTCAAA      420
CACTCGACAA CCCATTTCAA AAGCCTGGCT ATGGAAGAA GAGGAAAGGG AGGAGCCGCA      480
AGTTTGGGAG AAAGTGTATT TGGGATGCTG GAGTGGGAGC CTGTTTGTAG GAGCCATAGG      540
GCAGGCTTGA AGATGAATGG GAAAGAAGAT GAGNGGAAGA GGAGGTGAGA CTGAGAGCAT      600
CTCGAG                                         606

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(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

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GAATTCGGCC TTCATGGCCT ACTGGGGGTG AAATAATAAA GAAAAGCAAG AAGTGATTAT      60
CATAAAGAA AGGTAATGAT GTTTTTTCCC TTTCTCGAG                               99

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(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

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GATGAACAGA TACGATTGTG GGATTTTAT CATCTGTGTA GCAGGTGGTG TATGCATCGG      60
GGTACTCCTC GAG                                         73

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(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

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GAATTCGGCC TTCATGGCCT ACCAGAAGAT GCCTGCCTTC AATAGATTGT TTCCCCTGGC      60
TTCTCTCGTG CTTATCTACT GGGTCAGTGT CTGCTTCCCT GTGTGTGTGG AAGTGCCCTC      120
GGAGACGGAG CCGTGCANGG CAACCCCATG AAGCTGCGCT GCATCTCCTG CATGAAGAGA      180
GAGGAGGTGG AGGCCACCAC GGTGGTGGAA TGGTTCTACA GGCCCGAGGG CGGTAAAGAT      240
TTCCTTATT ACGAGTATCG GAATGGCCAC CAGGAGGTGG AGAGCCCTT TCAGGGGCGC      300
CTGCACTGGA ATGGCAGCAA GGACCTGCAG GACGTGTCCA TCACTGTGCT CAACGTCACT      360
CTGAACGACT CTGGCCTCTA CACCTGCAAT GTGTCCCGGG AGTTTGAGTT TGAGGCGCAT      420

```

CGGCCCTTTG TGAAGACGAC GCGGCTGATC CCCCTAAGAG TCGGACTCGA G

471

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCGGCC	TTCATGGCCT	ACGGAAAAAT	AGTTATATTC	CAGTCTAAGC	CAGAAATCCA	60
GTACGCACCA	CATTTGGAGC	AGGAGCCTAC	AAATTTGAGA	GAATCATCTC	TAAGCAAAAT	120
GTCCTATCTG	CAAATGAGAA	ATTCACAAGC	GCACAGGAAT	TTCTTTGAAG	ATGGAGAAAG	180
TGATGGCTTT	TTAAGATGCC	TCTCTCTTAA	CTCTGGGTGG	ATTTTAACTA	CAACTCTTGT	240
CCTCTCGGTG	ATGGTATTGC	TTTGGATTTG	TTGTGCAACT	GTGCTACAG	CTGTGGAGCA	300
GTATGTTCCC	TCTGAGAAGC	TGAGTATCTA	TGGTGACTTG	GAGTTTATGA	ATGAACAAAA	360
GCTAAACAGA	TATCCAGCTT	CTTCTCTTGT	GGTTGTTAGA	TCTAAACTG	AAGATCATGA	420
AGAAGCAGGG	CCTCTACCTA	CAAAAGTGAA	TCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:878:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAATTCGGCC	TTCANGGCCT	AATAACATCT	CCCCAGACCC	AGAAAAACAG	AAAGCTCCAC	60
AGAAATTAA	TGTTGAAGAG	AAACTCTCAA	AGGAAGTTAC	AGAAGAAAAC	TATCTCTTTC	120
CCAGTAAGTT	CAGTGGAAG	TGCACTAGAA	CATGAATATG	ACTNGGTGAA	TTAGATGAAA	180
GTTTTTATGG	ACCAGAAAAG	GCCACAACAT	ATTATCTCAT	CCAGAGACCC	AAAGCCAAAA	240
CTCAGCTGAC	AGGAATGTTT	CAAAGGACAC	AAAGAGAGAT	GTGGACTCAA	AGTCACCGGG	300
GATGCCTTTA	TTTGAAGCAG	AGGAAGGAGT	TCTATCACGA	ACCCAGATAT	TTCTTACCAC	360
TATTAAAGTC	ATTGATCCAG	AATTTCTGGA	GGAGCCACCT	GCACTTGCAT	TTTTATATAA	420
GGATCTGTAT	GAAGAAGCAG	TTGGAGAGAA	AAAGAAGGAA	GAGGAGACAG	CTTCTGAAGG	480
TGACAGTGTG	AATTCTGAGG	CATCATTTCC	CAGCAGAAAT	TCTGACACTG	ATGATGGAAC	540
AGGAATGCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:879:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 176 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCGGCC TTCATGGCCT AGGTTCTTAG GCTCTGAGAT ACTTCCTGCT TCCCTCACAA

60

ACATGCTTAT GTTGGGTGTG CATGCACATT TGCCTATCAG CACATATAAA GAGACAGTGG 120
 AAAAGTCAGA AGTGTTTTCA GGTTATTTTC CGATTGAATT CTAGACCTGC CTCGAG 176

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

GAATTCGGNC TTCATGGCCT ACTTCCTCTT CCTCCTCTTC CTCTTCCCCT TCCTGGTGCA 60
 GGTACATGAC ATTCCGCACG TTCCGGACGG CCCGGGCAGT CGGAGACAGG ATCACTGTGT 120
 CACAACTGTC ATCACTGTCC CCCTCACTGT CCAAAATGTA GTCCCGGGGA ACATGATTCC 180
 ACAGCCCATG ATGTCCCCTT TGTAACAGCG TGGCCCAAAG GGTCCCCAC ACCACCTTCC 240
 TGCCCTCATG CTCCGGCTCT ATCTCTTCCC CATCCTCTTC CTCTTCTCTT TCCTCCTCTT 300
 CCTCTTCCCC TCACTCGAG 320

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

GAATTCGGCC TTCATGGCNT AATCTGTAAC ATGAGGGAAT AAAGTAGTAT TATCTAAGCA 60
 TTCTCTAGAC TTAAATATG ATTCTAGAC CACTGAGGAG ATTAAAAATG AGGTGAGAGG 120
 GATTTCAAAA TGAAGCGACC TGCCAGACAT GGTGGCTCAC AGCTGTCATC CCAACATTTT 180
 GAGAGACTGA GGCAGGGGGA TCGATTGAGC CCAGGAGTTC AAGACCAGCC TGGACAACAT 240
 CGCAAGACCC TGTCTCTACA AAATAAAAAA AATGTAAAAA TAGCTAGGTG TGGTGGCACA 300
 CACCTATAGT CCCAGCTACT CGAG 324

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

GAATTCGGCC TTCATGGCCT ACAGAAATTG AGAGTAAACA GAAACATTTA TAGGTCAATT 60
 GCTATTGATT ACGAACGTCT AAGTGCAATT CAGTGTTTTA TATTTTACAA ATGTGTTGGA 120
 ATTTTACTTT ACTTATTCTT TTGAGACAGG TTCTCGCACT CCAGCCTAGG CAACAGAGTG 180
 AGACTCCGTC CCAATCAGTC AATCAATCAA TCAATCAATA CCACAGCGGA GAAAATCTTT 240
 ACAACTTTTG GTTAGGTAAT GATTTCTTAG GTAGGACACA CAAACACTC GAG 293

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

GAATTCGGGC	CTTCATGGCC	TACCTACGGA	GTGCTTCTTT	CTCACCCTGC	ATGCTCACCA	60
CCTCTCTATT	CTGCCTAGTT	GCCGTCGCTA	TATCCGCAGA	CTCCGGGCTA	TCCGGGAGCT	120
CAATAGGTAT	GTGCCATGAT	ACCGTGCTCT	GGGATTGCCT	GAGTTACCAC	TTTTTCTCAG	180
GGGCAGGCAA	TTCCATTGTG	AACAGTAGTT	TTGAATGTTG	GGGGAGGTAT	GTACGTTATA	240
TAGTGTCTT	GTCTGCCTCC	ACCGCCACAT	CCATGTTGCT	CAGTTGTCCA	GAGTTCTTTA	300
CCTGGTGAAG	TGATCCAAAC	CTTGATTCT	GAGAGTTCTG	AACCCCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

GAATTCGGCC	TTCATGGCCT	ACCTGGTGTT	TTTTGTTTTT	GTTTTTACCC	CTTGTCTTAT	60
GCCAGTGAGT	TCCTTCGGGG	TTACTCCTGC	AGTAGGTGGA	CTATCATCTG	GGACAGTTGG	120
GGAAGCTTCG	ACAGCCCTGA	GTTCAGCAGC	CCAGGTAGCT	TTGCAGTCTC	TCTCTCATGC	180
AATGGCTTCA	GCCGAGCAAC	AGCTACAGGT	GCTGCAAGAG	AAACAGCAGC	AGCTTTTGAA	240
GCTTCAGCAA	CAGAAAGCAA	AGCTGGAAGC	CAAGTTACAT	CAGACCAACAG	CTGCAGCAGC	300
TGCAGCAGCA	TCAGCAGTAG	GTCCTGTTCA	CAACTCTGTG	CCTTCCAACC	CAGTGGCTGC	360
CCCTGGATTG	TCATTTCATC	CATCTGATGT	TATTCACCCC	ACTCCAAAAA	CAACACCTCT	420
TTTTATGACT	CCACCACTCA	CCCCAGCCCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

GAATTCGGCC	TTCATGGCCT	AGACGAATTT	CAAGTATTTA	TTACCTCTGT	TGAATATAAT	60
TTATTGAACT	GTAAGCTTAT	ATATAATTCA	ACTTTAAAAA	ATGGCCTGAG	TTGAACAACC	120
AGCTCACAC	AATTCTATAA	TCTAGGAGTT	GGCTCTCGTG	GGTCGGCACA	GGTCAGCTAG	180
GGTGCCTGGT	CCTGGTGGAG	GGCAGGAGGC	CCCCTTCCCC	TGGCCTCCCT	AGCCAGTCCC	240
CACACACAGC	CCCAGTGGCC	TCCACAGCTC	CACCCTCCTT	TCATGGCCGT	TCTTTTTCTT	300
AGATGCCAAA	AGCAGAAAGC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:886:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

```
GAATTCGGCC TTCATGGCCT AGGGAGAATT ATTTGATATT TGTTGATACT TGACAGCAGA      60
TAATTTTTTTA ACTGCAAGAC CACTAGAGGT CACCAGCGTA AAACCTTCAA CTTTGATTCT      120
GCTGGTAGTG AACTGAAAAG TTCAACTACT ATTCTGCAAT GTTTCCTTTG TTTCTTTTTT      180
TTTCTTTTTT TTGTTTTGAG ATGGAGTGTT GCTCTGTCAC CCAGGCTCGA G                231
```

(2) INFORMATION FOR SEQ ID NO:887:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```
GAATTCGGCC TTCATGGCCT AGTTGCAGAA GAAAAAAAAG AAAATCCATC CCTGCCACTC      60
ACAAGCTGCT ACCTACAGCA GATTACTATC CTAAGCCTCA ATTTTGCCAT CTGAAAAAAA      120
CAGAAAAAAC AGTTAATAAT ACCTCACCAG GTTCTTGCTA ATTCTTTAGT AACACAGAGG      180
AATCTTTTAG CCCTTCTTTT TTTGTCTTAT AGCTTAAACC ATGCTGCAGG AAATGTATCA      240
ATCCAAGATA AAAGAGCTGA AATCCAAGAA CCTCCCCCTC ACATTTTGTT TGTTTGTGTTG      300
TTTGTGTTTG TTTGTGTTAG ACACAGGATC TTGCTCTGTC ACCCAGGCTC TCGAG          355
```

(2) INFORMATION FOR SEQ ID NO:888:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```
GAATTCGGCC TTCATGGCCT AGCCACCACG CCCAGCCTCA ATTGCATTTC TACACACAAG      60
GAATAATCCA AAAAGGAAAT TAAGGAAACA ATTCCATTTA CAGTAGCATC AATATGAATA      120
AAATATTTAG AAATAAACTT AACCAGTGAT GTACAGTGAC AGTATGTACA CTGAAAGCTA      180
CAAAACATCA CTAACATAAA TGAAGACAAA TTAGACATCC TGTGTTAATA CATTGGAAGG      240
CTCTTAAGCT GTCAATACTA AAGGTGATCT ACAAATTCAG TGCAATCCCT GTCAAAATCC      300
CAATGATGTT TTTTGAAGAA ATAGAAAAAC TCATCTGGGA ATTCATACGG AATCTCGAG      359
```

(2) INFORMATION FOR SEQ ID NO:889:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 203 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GAATTCGGCC TTCATGGCCT ACTAAATTGG AATAAAAGTT TTAATAATAC TAACTTGTCT	60
TTTTTTTTTT TCTAAAATTG ATTCCATTGC TACTGTTAAT AGTATAAATC TTTAAAGGGT	120
GAATTTTTTG GATGAAATTA ATGCTTATTC TTTTCTTTT AAACAGGGCA ATAAATGTGT	180
TCGTAAGTGC CAACCAACTC GAG	203

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 376 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGCCCGGCC TTCATGGCCT AGTTGATTGG	60
TTTTCTTAGG TCAGCAATGA GTCTTAAAGA TAAATTTCT ACTGTGTAAT CTTAGTGT	120
TTCTTTTTTT TTTCAACTAT CTTTAAATCA GTTTCAAACA TTTCAGTGAT TAAAAGAGAG	180
ATTTGTTGTG GTTTTGTGTT GGAGCAGAAA TGGATTCAA GGAGTTTACC TTCAGAGCTT	240
TTGTTTTTGT TACGGTGGGT CTCTCTAGTG GAAAAAAAT TTCCCATCC CTTTGAAAT	300
ATTTTCTTTA AAGGAAATCA TGTTTTTAAA ACAAATTATC GAAATCAGCT TTCTAATCAA	360
TTGAATCAT CTCGAG	376

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTCGGCC TTCATGGCCT ACGCTTGTC GTGGCTTCTC TGAGAAGAAA AGTTGAAAAA	60
GGGTAAAAGT TTTAGGAAT ATTCGGGCTC TCTATTGCTA AGCATAGCGA GTGTCGGTTT	120
TCTCTCTCCA ACAGACATCG CTATTGCGGT TCCGAGGCAG TGGGAAGAGA TGCGGCCCCCT	180
GGACATCGTC GAGCTGGCGG AACCGGAGGA AGTGGAGGTG CTGGAGCCCG AGGAGGATTT	240
CGAGCAGTTT CTGCTCCCGG TCATCAACGA GATGCCGCGA GGACATCGCG TCGCTGACGC	300
GCGAGCACGG GCGGGCGTAC CCACGGACCC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC	TTCATGGCCT	AGTATCTTTA	AAGTTAATGT	CTAGCCAAGA	GTTTAGTAAA	60
CGAAGAATTA	AACTGCACTG	TTGATCGGTG	CTTTGTGTAA	ATACATCTTT	AACATTTGGG	120
TGGAGAGGGG	CCTTAAGAAG	GACAGTTCAT	TGTAGGAAAG	CAATTCTGTA	CATGAGTTTA	180
AGCATTCTTG	TTGCATTGTC	TCTGCAGATT	CTATTTTGTG	TTACAATATT	GAAATGTATG	240
TTAGCAAAAT	GGGTGGATTT	TCAAATAAAA	TGCAGCTTCC	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

GAATTCGGCC	TTCATGGCCT	ACTCATCGCT	AGTCCATATT	TGGCCTCCTT	TTAAGCAGTT	60
AATTAACAGG	TATTTTATA	GCATAATGGG	TTTCCTCAAA	CCACCACCCA	ACCAAACCC	120
AGCCCTTGAT	GATGACCTGC	GCCCACCACG	CAGGGCGCCC	TTGATGCACA	CGCACCTGCC	180
GCCCCGCCC	TGTGACCACC	GCCCTGAGTG	CCGGGCTCAT	CATCCCTTCC	ATGCCCTTTC	240
TACATTGCTA	CTAAGAATCT	GTGTGTATTC	ATTAAGACCA	TIACTTTCT	TTCAGATTTT	300
AAATTTATTA	AAGGCTTTAG	TGCTGAATGT	GATTTTGAGG	ACTCTTTTAA	AAAAATACTT	360
TTGGTTGGAA	TGTGGACATT	TCCCACTTAG	CATTGTGTTG	CTCATGTTCC	TCCATATTGA	420
TGTGTGTTTA	GCTAGAGTAC	CCCCGTCTAA	CTCTGCGAAT	ATGCCACACT	GTGTGCACCT	480
GCATACACTC	GAG					493

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGCC	TTCATGGCCT	AAAAAAAGGA	AATAGAATCC	TATAATTTAC	CATGAAAATA	60
TTATGAAAGA	TACAGGTCAG	CATGTATTGT	AGGAGCAAAC	TTAGTGGTCC	TGCTGGTCTT	120
TTGGGTTTAT	TGGTTTGTGG	TTAAGTTTCA	AGTAAGTTCC	CTCTTGGTCT	GGTGTGTTCT	180
GCTGCTGGTG	AGCTCCAGCA	GCTCAAACCA	GCTCTCTCCC	ATTAGTAAGC	CATGCTAAGT	240
TTAGTTTAAC	ACCCATAGTA	GGCCTAAAAG	CAGCCACCAA	TTAAGAAAGC	GTTCAAGCTC	300
AACACCCACA	TACTCGAG					318

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```
GAATTCGGCC TTCATGGCCT ACATTGAGTC AGTCACCAGG TGT TTT TTTT TGGTTT TGT 60
TTATTTTGT TGT TTTCTGT TTTGCACCTG CAGTATCTCG GCAGGTCAGA CTGTCATGCC 120
GTGCAGGTGC CAGCCCTCTC TCTGCTGTTT TTGCTCTTGT TGCTCTCAGA GCCAAGAGCC 180
ACTCTGCACC CAGAGGGCCT CCCATCCACA CCAGCCTGCC CTTTACTCAG CTCTCACTTT 240
CGTCATCACC TGTGGGATCC TGTCTGCAGA ACCCCCTCAA AACTCTTTCC TTCACGGTGC 300
AGCTCCACCC ATCCTCGAG 319
```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```
GAATTCGGCC TTCATGGCCT AAGACAGGGA GGCAGACACA TTGAGAAATA ATACAAATTA 60
TTATCATCTT CATAAATAAT ATAGACAGCT CTGACGATAA AGGTGTGTAC CAGATATGAC 120
AGGAGCAGAG CTGAGGCATC CAGCACCTTC AGGGATGAGG GGTAAATGGTG TTAGGAAAGG 180
TTTTCTGTAC TTCCTCTACG TGGGTGCTTT TCTCCATCTC TACTTTCAA TCCACCCAT 240
GCTAAGGCCT TATCCAAATG ACCACTGCCA GAAAG 275
```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```
CTCGAGTTCC CCCATCAGTC TATGTGCCCC ATGAGAGCAG GCACACATAG GAACAGGTCA 60
GTCAGTTTCT GATGCCCAGC ACAAGGCCAG GCACAGAGTG GCAGGGGAGT TGTGGGGCCC 120
CACAGACCAG AGGCCAGCGC CAATTCTGCC CCTGCTATTT GCATGCCCTC ACCTCTGTGG 180
GCCCCGTGCT GTCTGCGAGG ATTCAGGGAG TAAGTCCTGG AGCAGACGCG GGGTTGGAGC 240
ATGCAGAACT GCCAGGTGCT ATCAGCACCA TCATTCTTTC CACTCCCTAC TCCCTTTAGG 300
CCATGAAGGC CGAATTC 317
```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```

GAATTCGGCC TTCATGGCCT ATGACCTGGA AGAGTGGTGC GAAAGAGAGG AAGGGGCAGA      60
GGCCAGGAGT GTCATGCAAT TGCTGTGCCT CCTCACGGAA TTATTGAGTG TGTCCCCTGT      120
GTCATAGACC CATCACAGTT GTCTCTTCCA GTACTTCGTG AGCTCCCTAA GGGCAGGGAC      180
TGTGTATACT TCTGGGCGCT AAAATGAGTG TGAATCCATG TCAGGCACTC TGTGCCAGTC      240
TTTATTGGAA ATATATGATT TTATCTTAAA TAGTCTTCA ATGTAGGTAC TATCACTTGC      300
CCTGACTTTA GAGATACAGG CACTAAGGTT TGTGGAGGTA AATAACTTTC CCAAGATCCT      360
CGAG

```

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```

GAATTCGGCC TTCATGGCCT AGGTGTTTAT GGATATCCTC CAGATTATTA TGGATATGAA      60
GATTATTATG ATTATTATGG TTATGATTAC CATAACTATC GTGGTGGATA TGAAGATCCA      120
TACTATGGTT ATGAAGATTT TCAAGTTGGA GCTAGAGGAA GGGGTGGTAG AGGAGCAAGG      180
GGTGCTGCTC CATCCAGAGG TCGTGGGGCT GCTCCTCCCC GCGGTAGAGC CGGTTATTCA      240
CAGAGAGGAG GTCCTGGATC AGCAAGAGGC GTTCGAGGTG CGAGAGGAGG TGTCCAACAA      300
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

```

GAATTCGGCC TTCATGGCCT AATTTCCATC ANGAANTCNG TGAGGTTCTC AGATGTGGCA      60
ATGTCCACGC AGTTTCGCAC CANGGCATGG CGGTTCTTGT CTCCCATTTC TGGCTGTCCC      120
AGGTAGCGCA GATGCCAGGG TGCCCCTGCC CTGTCCATAG AGCGTCGGGC CCTGAGAACA      180
AATGGGCTGG CTTGCTGGNC CTTAAGGAGG AATACCATCT CATGGTCAAG GAAAGTCTCA      240
GGTTCCATGT TGTACACAA ACCACGAAGG CGGTGGATGA GGCTTTCCAA ACTGTGATCT      300
AAAACACTTC CCTGCAACAG GTACTIONATC ATGTTAATGG TGCCCCCAGT GACAGGGATC      360
ATGGTGAAGT GAGGTGCCTC CATGGTGTCT AAGTTGAAGA CAACACAACCT GGACTIONAG      420
CCCCAGTCA GGTAAGGCAC GGGATATACC TCCTTGAGGC TGAGTGTCT TCCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

GTACCAGGCG	NATCCTGAAG	AGACACTACT	ACNACCAAAT	GGAACCCAG	AAGAAATAAA	60
ATGTTTGGAT	CNAATAAAGA	AAATTGAAAC	NACTGGTTGC	NACCNAGAAA	TAACATCATT	120
TGAAATTAAT	CTGAAGGAAA	AAAAGTACCA	GGAGGACTTT	AACCCGCTGG	TGAGAGGATG	180
TTCCTGTAC	TGCTGTAAGA	ATCACACTCG	GGCATACATC	CACCATCTGC	TGGTGACCAA	240
TGAGCTGCTG	GCCGGAGTCC	TGCTTATGAT	GCACAACTTT	GAACACTACT	TTGGGTTTTT	300
CCATTACATC	CGGGAAGCAC	TAAAAAGTGA	CAAACCTGGCA	CAGTTGAAAG	AGCTCATCCA	360
CAGGCAAGCA	TCTTGAGATC	TTGCAAATAC	AAGTCTCACT	CTTCACACTG	AGCCTGTACC	420
ACTGTTGTAA	CATGGGAAGA	CGTGAAGAAG	AAATAATCTG	AGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

GAATTCGGCC	TTCATGGNCT	AGCCAGGGAT	AAAAATACAA	TCTTCAAAGC	GGTCAGAGAA	60
AAAATGCAAA	TTATGAACAG	AGGCATCAAG	GTAACAATAA	CAGCCGAATT	CTGGTCAGAG	120
ACAATGCAAA	CCACACATGA	GCAGAGCGGN	CCCTTTAAAG	AACTCAAAGG	AAAGAAAAAG	180
TGAATCGACC	TGGAGCTCAG	AGCCAGATAA	AATATCTTGA	AAATATGAAA	GTAAAAAATA	240
GAGAAGAGGA	GCTCATGAGG	GGAGAGGGAC	TAGTGTAAGG	AAAGGTGTGT	AGGTGGGAAA	300
AGGNCCAGTG	TGTTTCAGCA	TAGATAAGAA	AAGNAGACCA	CGCNAAGAGG	TAGACGAACA	360
GGCAAGGTTG	GTCATCAGGT	GAAAAGACAG	GTTAGTGGAC	GATCAAAGAG	GNTCTTGACT	420
GCCGTGCTAC	AATAAACTAC	ATATTTTTTT	TTCAGGCAAA	GTAAGGATTT	CAGAGATGAT	480
TTTTAAGCATG	GGATGATATA	ATGCACAGTA	TTTGTAGAAAT	ATTGTTCTAA	ATCAAGAGTG	540
GAGAACCCAC	TGCGGAGACA	AATTCTCGAG				570

(2) INFORMATION FOR SEQ ID NO:903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

GAATTCGGCT	TCATGGCCTA	CTCCCATCAA	ACTCCAGAGA	AGAGAGTGAA	TACTGGAGAA	60
GAAAGGAGGA	AAATATCTGA	GGAAGCAGCA	AGAAAGAGAA	GGCTGGAATT	TATTGAAAAA	120
GAAAAGAAAC	AAAAGGATCA	GATTATTAGT	TTAATGAAGG	CTGAACAAAT	GAAAAGGCAA	180
GAAAAGGAAA	GGTTGGAAAG	AATAAATAGG	GCCAGGGAAC	AAGGATGGAG	AAATGTGCTA	240
AGTGCTGGTG	GAAGTGGTGA	AGTAAAGGCT	CCTTTTCTGG	GCACTGGAGG	GACTATAGCT	300
CCATCATCTT	TTTCTTCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

GAATTCGGCC	TTCATGGCCT	AAATGTATGT	AAGGTACAGA	GAGGATGTCT	GGAGGTGCGC	60
CCTGTGGATA	TCTTAAGCCT	TTAAGGGTGA	GCAAAAAACA	ATAGGTTTAC	AAAGGAAAAAT	120
GAGAATGGGC	TATGAGAAAG	GTAAGAGGAA	AACCAAGGAA	AGAGAACGTT	TTGAGACAGT	180
AGTAGTGGTC	AGCAATGTCA	AATTGCTGCA	GAAATTTTCT	AAGAGTGAAA	TTGGGTTTAG	240
CAGCTGCAAG	AGGAGTTCAT	TTAATTGGTG	TAGCAGAAGC	CCATTAGATT	GCAGTGTGAT	300
GAGAAATTAT	TGGGAACAAG	GATACTCGAG				330

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

GAATTCGGCC	TTCATGGCCT	AGATGCCGCC	ATCTACCAGG	CCTCTGCCCC	AGAACAGCAA	60
GGGCATTGTG	TCCTGCTCAG	GGGTCCTGGA	GGTGGGCACC	ATGACTGAGT	ACAAGATCCA	120
CCAGCGCTGG	TCGCCNAGT	TGAAGCGCAA	GGCTGCCGCA	AAGCTGCGCG	AGATCGAGCA	180
GAGCTGGAAG	CACGAGAAGG	CGGTGCCTGG	GGAGGTCGAC	ACTCTGCGCA	AGCTCAGCCC	240
CGACCGCTTC	CAGCGAAAGC	GGCGATTGAG	CGGGGCTCAA	GCGCCGGGCC	CCTCGGTCCC	300
TACCAGGGAG	CCTGAGGGTG	GGACCCTGGC	GGCTTGCCAG	GAGGCAGAGA	CTGAGACTGC	360
TCAGCACTCA	GGTTGGGCC	TGATCAACAG	TTTGCTTCT	GGAGAACTGA	CCACCAACGG	420
GGAGGCTGCC	CCGAGAATG	GCGAGGCTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

GAATTCGGCC	TTCATGGCCT	AGCCATGGAT	TTAAAGAAAT	TGTGACTAAA	CCAATGTTTT	60
AGCATTGATA	AATGGGAAAT	TGCGGAAGGA	TGTAAACGTA	GAGTTTAACT	CTACAACTTG	120
GCTTAGGGAC	TCAGGTATGG	ACAGTGAGAA	TAAGTTGGTT	TAGGGACTCA	GATATGGACA	180
GTGAGACTGG	CCACATGAGT	GCCTTTCTCA	CTGTCACACT	CTTACCCAGG	TTGGAGTGCA	240
GTGGCTGTCT	ACAGGTGTGA	TCATAGCTCC	CTGCAGCCTT	GAATTCCTGG	GCTCAAGCAG	300
TCCTGCCTCA	GCCTCCCAAG	GAGGTGGGAC	TAAAGATGGT	GTGCCACCAC	ACCTGGCTAA	360
TTTTTAAATT	TATTGTAGAG	AAGGGGTCTT	GCTATGTTGC	CCAGGTTGGT	CTTGAACCCC	420
TGACCTCCAG	GGATCTCTCC	TGCCTTGGCC	TCCTCAGGAG	CTGGAACCTAC	AGATATATGC	480
TAATGTCTTC	AATTTATGGA	AATGCAGAAA	TGCTCGAG			518

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

GAATTCGGCC	TTCATGGCCT	ACTTGCTGCT	GGCCTTTGAC	ATCAGCTTGA	AGAAGAATAC	60
CCACACCTAC	TTCTACACCA	GCTTTGCAGC	CTACATCTTC	GGCCTGGGCC	TTACCATCTT	120
CATCATGCAC	ATCTTCAAGC	ATGCTCAGCC	TGCCCTCCTA	TACCTGGTCC	CCGCCTGCAT	180
CGGTTTTCT	GTCCTGGTGG	CGCTGGCCAA	GGGAGAAGTG	ACAGAGATGT	TCAGCTACGA	240
GTCCTCGGCG	GAAATCCTGC	CTCATACCC	GAGGCTCACC	CACTTCCCCA	CAGTCTCGGG	300
CTCCCCAGCC	AGCCTGGCCG	ACTCCATGCA	GCAGAAGCTA	GCTGGCCCTC	GCCGCCGGCG	360
CCCGCAGAAT	CCCAGCGGTC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 630 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

GAATTCGGCC	TTCATGGCCT	ACCCCTGTCC	ACTTTGGTCA	CTGTTGGCTG	GGGCCCCGTGG	60
AGCTGTCCAG	AGGGGACCGG	GGCCAGTAGA	GTAGAGGACA	GTATTTGTAG	AGCAGGCATT	120
TCTTCTGAGG	TTCCTTGGA	TCCCCTGAGC	TATGAAAGCT	GGAAGCAGTT	GAAAGTTTTT	180
AGGGAGAGGG	ATGCTGGAGT	CTCAGAACTT	TAGAGGTGCT	GCAGGAGTCA	GTTCTGGCAG	240
TGAGAGAACCA	CTTGGGCGGG	TTTCACACAC	ACACAGCACT	TGAGCCATT	TTGGGCAGAA	300
GGGGCCTCAC	TTCCAAGCAC	AAGGAGTGTT	AACGAAAAAT	TATTAACATG	GTAAGGAAGA	360
CTTTATTTCAG	GGCCATTGCA	GTAGGCATCC	CAATAGTGGG	GAGAGATGGG	GCTCAATTCC	420
AAGTACAAGA	AGAACAAGTG	GGCACTTAGC	CAAGGAGCAG	GTGGGAGGGG	GTCAGAGGAT	480
AGAAAATTAC	TAAGAGGAGA	CGTCAAGGTT	AGGGGGATT	TTGCTGAAGT	CAGGCCAAGG	540
AGCAGGTGGG	AGGGGGTCAG	AGGATGGAAA	ATTACTAAGA	GGAGACGTCA	AGGTTAGGGG	600
GATTCTTGCT	GAAGTCAGGC	CTTGCTCGAG				630

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 678 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTCGGCC	TTCATGGCCT	AGACGGTGAT	GTTTTTGGTA	AACAGGCGGG	GTAAGATTTG	60
CCGAGTTCCT	TTTACTTTTT	TTAACCTTTC	CTTATGAGCA	TGCCTGTGTT	GGGTTGACAG	120
TGAGGGTAAT	AATGACTTGT	TGGTTGATTG	TAGATATTGG	GCTGTAAATT	GTCAGTTCAG	180
TGTTTTAATC	TGACGCAGGC	TTATGCGGAG	GAGAATGTTT	TCATGTACT	TATACTAACA	240
TTAGTTCTTC	TATAGGGTGA	TAGATTGGTC	CAATTGGGTG	TGAGGAGTTC	AGTTATATGT	300
TTGGGATTTT	TTGAGGGTG	TAGGGATGCG	AGCTCTGGAG	GGGACCCCTC	TTTCAGGACA	360
GCGCCCTGGC	CCCCAGTGCC	CCACTCACCT	TCCTGGGCGG	GAACCTCAAG	TGCAGCCAGG	420
CTGGGGGACA	GAGTTCCTCC	CAAGCTGAGA	CAGGAGGGGT	CTCAGGCGGC	AAAATTCCTC	480

CTCCAACCTCC TGGTGGGGTG GGGGTCATGG ATGAGGGGGG CCCCTTCCTT CCCAGCCCA	540
CTCAGGGGCAC CCCTGGCCCG TCCGCCCCA CCTCCAGCTG CTTTCATGGTC TCCTCCAAGC	600
TGAGCAGGTT CTCCTGGATT TCCTGGGTCC GTGCTGGGCT CAGGGGGCCG CCCCTGGGA	660
CCCCATCCCC ATCTCGAG	678

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

GAATTCGGCC TTCATGGCCT AAGAAGAGGA GGAAGAAGAC GGGGCTGCAG TTGCTGAGAA	60
ATCACATCGA AGAGCTGAAA TGTAGCGGCA CCCAATTTCT AGACAACGCT CAGCCAACGG	120
ATTCTTTTCA AGCTGCTCAA ACATAAATCT GCCTACTGAA CTCTAGGATA TTAAATTACA	180
AAAATTAAGA ACTTAGACTT TTTTAAACT TTTGTATTAG AAATGCGCAT ACATTTATAT	240
GAATATATTT TGATAACGTA GGTCTAGAGC TTCTTTTATA TTCAAGCTTA ACATGANAAA	300
GAAGAAAAAC AATAAAGTAA ACCTGAGCCC CCACGTCCCA ATTTTTTAAT AGATTATGTG	360
ATGTTGAAAA GTCATTGAT TTTGTATATG TTTCAGCGTG TTACCTTTCT GGCTTCCAGT	420
TCCCAGGTGT TCTTTGTTG CCTTTGATAA AATACAGGAT TTAAGAACAG AGAGTACTGC	480
AAAATGCCAT GCAGACTTA AAGAGAATGG CCTGTTTACT AATTGCTGCC CTCTGATGT	540
CTTTATGTAT AGCTCTGATA GAATTTTCAC CAGTCTATGT ATCTCTGGAG TGAGATCCTA	600
TGTACAAAGT GACATACAAT TGGAAATCCT CGAG	634

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

CTCGACCTTC ATGGCCTAAT GAGCTGTTTT GTAAACGAGA TTTGTTTTGT GGGAAAGGGA	60
ATTTTGTTTC AAGACTTCCC TAAGAACTG ATAGCATCGG GTAATTCTTA AATTTGACTT	120
ATCATAATGG TATATCTGGA AGGAATTGT CAACTGATAT GTTATAATTA TTTTAAATT	180
TTTTTAAATT TTTGAGATAG GTCTTACTCT CTGCCCAGA CTGGAGTGCA GTGGTGTGAT	240
CATGGTTCAC AGCAGCCTCA AACTCCTGGG CTCAAGAGAT CCTCCACCT CAGTCTCCTG	300
AGTAGCTGGG ACTAAAGGCA TGTGCCACCA TGCCTGGCTA GTTAATTTTT TTTTTTTTTT	360
TTAAGTAGAG ATGAAGTCTT GCTGTGTTGT CCAAGCTGGT CTCACACTCC TGAGCTTGAG	420
CAACCCTCCT CTAGGCCATG AAGGCCGAAT TC	452

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGGCC	TTCATGGCCT	AGCGGGCTAT	GTGGCTGATT	GAAGAGTATG	CAATGAGCGA	60
TTTGTAGTCT	GTTTGTCTGA	GGCAGATGGA	GCTTGTATA	ATTATGCCTC	ATAGGGATAG	120
TACAAGGAAG	GGGTAGGCTA	TGTGTTTTGT	CAGGGGGTTG	AGTTTGATGA	GTTTAGGCAG	180
GGCCTGGATC	ACCTCTTTCT	TCTCCAGCCC	ATTGAGCACC	GGGATGAGGA	AGCGGACGTC	240
TGGCAGTCGC	TTGTGGTAGA	GATCCCGGAC	CCGCTTCACC	AGCTCTGGGG	AGGGTGGGAC	300
TTTGTCTGTG	AGGCTGTGCA	GACATCTCGT	GACCAAGTGC	TCTGCTCCCT	TGGGACAATT	360
TTCCACCAGC	AGGAGCAGCT	CCGGGGAGTT	CATGCCCAT	CCTCGGATCG	GCTGCTCAAT	420
GACCCTCAGC	ACCGTCCGCT	TGATGTCGGC	GATGGCTTCA	GTGTACACGG	CCGCCAGTTC	480
GTGGATCAGC	TTGTGGGCTC	GAG				503

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

GAATTCGGCC	TTCATGGCCT	AAAAGATATT	ATTTTAAATT	AATTTTGAAC	TATAGAAAAG	60
TAGTACAAAT	AATTCAGAAA	ACTCCCATAT	TTACTTTACA	TGGATTACAC	AATTTTTAAC	120
ATTTTGTAC	ATTTGTTTGC	TTCTCTCGCT	GTCTCTACAC	ACACATACAC	ACACAAATTT	180
TTGGGAGGTC	TAGTGACAGT	CCCGGCCGCG	CCAGGAGGAC	AGGAAAACAT	CACTCACGAA	240
GTCATCCTTG	GCCCCGAGCC	GCTTTGTCTC	GTCTTCTGTC	AGGAGGCCCT	CCAGGAGGTC	300
TCTTGCGGAA	TTTGTAATAT	TTGGTTTCAT	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGGCC	TTCATGGCCT	AGACAGTCAA	TGTGGATGAG	AACTAATCGC	TGATCGTCAG	60
ATCAAATAAA	GTTATAAAAT	TGCAAAAAAA	AAAAAAAAAA	AAGAAGTGAG	GATGACAGGA	120
GAAGGTAGAT	GGTGCAACAT	GAGGGTGCTT	TCTACCAACA	AGGTGTGCAG	CATTGGACAC	180
GCATGACCAC	GTGACCTGCA	GCTCTGATGG	TGCAACATGA	GGGTATGTCC	TACCAACAAG	240
GTGTGCAGCA	TTGGACATAC	TTGACCAAGT	GACCTGCGGC	TCTGAAGGTC	CCACCTGTTC	300
TCGTTCTAAA	GTCACCATTT	CTGACCGCTG	TGCTGTGGAA	GGGGAGGCAA	TCAACCAGAA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

GAATTCGGCC	TTCATGGCCT	AGGCAACAAG	AGCCCTGAAG	TGCTCCGGGC	ATTTGATGTA	60
CCAGACGCAG	AGGCACGAGA	GCATCCCACG	GTGGTACCCA	GTCATAAATC	ACCTGTTTGT	120
GATACAAAGC	CCAAGGAGAC	AGGTGGAATC	CTGGGGGAAG	GCACACCGAA	AGAAAGCAGT	180
ACTGAAAGCA	GCCAGTCGGC	CAAGCCTGTC	TCTGGCCAAG	ACACATCAGG	GAATACAGAA	240
GGTTCACCCG	CAGCGGAAAA	GGCCAGCTC	AAGTCTGAAG	CCGCAGGCAG	CCCAGACCAA	300
GGCAGCACAT	ACAGCCCCGC	AAGAGGTGTG	GCTGGACCAC	GTGGACAGGA	TCCGGTCAGC	360
AGCCCCGTGT	GCTAGAGGAA	CACCACTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

GAATTCGGCC	TTCATGGCCT	ACGGGTGTTT	GAGGAGTACA	TGCGGGTTAT	TAGCCAGCGG	60
TACCCAGACA	TCCGCATTGA	AGGAGAGAAT	TACCTCCCTC	AACCAATATA	TAGACACATA	120
GCATCTTTCC	TGTCAGTCTT	CAAACTAGTA	TTAATAGGCT	TAATAATTGT	TGGCAAGGAT	180
CCTTTTGCTT	TCTTTGGCAT	GCAAGCTCCT	AGCATCTGGC	AGTGGGGCCA	AGAAAATAAG	240
GTTTATGCAT	GTATGATGGT	TTTCTTCTTG	AGCAACATGA	TTGAGAACCA	GTGTATGTCA	300
ACAGGTGCAT	TTGAGATAAC	TTTAAATGAT	GTACCTGTGT	GGTCTAAGCT	GGAATCTGGT	360
CACCTTCCAT	CCCACTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

AGATGGACTG	GCTTCAGCTG	GTTTGGAGG	TGCTTGTTT	TGGAANAAAT	GCAGGGATGG	60
CAGANGCCTG	GCTCTGCAGC	CAGGANCCAC	TGGTGCGCAG	CGCTGAGCTG	GGTTGCACGG	120
TCGACGAAGT	TGAGAGCCTC	ATCAAGCGGC	ACGAGGCCTT	CCAGAAGTCA	GCAGTGCCCT	180
GGGAGGAGCG	ATTCTGTGCG	CTGGAGAAGC	TTACTGCGCT	AGAGGAGCGG	GAGAAGGAGC	240
GAAAGAGAAA	GAGGGAGGAG	GAGGAGCGGC	GGAAACAGCC	GCTTGCTCCC	GAACCCACAG	300
CCAGTGTGCC	TCCAGGGGAC	TTGGTGGGCG	GCCAGACAGC	TTCTGACACC	ACCTGGGACG	360
GAACCCAGCC	ACGCCACCA	CCATCCACAC	AAGCACCCAG	TGTTAATGGA	GTCTGCACAG	420
ATGGAGAGCC	CTCACAGCCC	CTGCTGGGAC	AACAGAGACT	TGAGCACAGC	AGCTTCCCCG	480
AAGGGCCGGG	ACCTGGCTCA	GGGGACGAAG	CCAATGGGCC	CCGGGGAGAG	AGGCAGACCC	540
GGACTCGGGG	CCCGGCCCA	TCTGCAATGC	CCCAGAGCAG	GTCTACCGAG	TCAGCCCATG	600
CTGCCACCCT	GCCGCCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

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GAATTCGGCC TTCATGGCCT AACATGGGTG ACACGGATGT CTATAGTGTC CACCACATTG      60
TCTGGCATGT GGAGGAAGGA GGCCCAGCCC AGGAGGCAGG ACTCTGTGCT GGGGACCTCA      120
TCACCCACGT GAATGGGGAG CCTGTGCATG GCATGGTGCA TCCTGAGGTC GTGGAGCTGA      180
TCCTTAAGAG TGGCAACAAG GTAGCAGTGA CCACAACGCC CTTCGAAAAT ACCTCTATCC      240
GCATTGGTCC CGCAAGGCGC AGCAGCTACA AGGCTAAAAT GGCTCGGAGG AACAAAGCGAC      300
CCTCCGCCAA GGAGGGCCAG GAGAGCAAGA AGCGCAGCTC CCTCTCCGG AAGATCACGA      360
AGCAGTCGAA CCTGCTGCAT ACTAGCCGCT CGCTGTCGTC GCTGAACCGC TCGCTGTCAT      420
CCAGCGATAG TCTCCCGGGC TCGCCTACGC ACGGGCTGCC GCGCGCTCG CCCACGCACA      480
GCTACCGCTC CAGCCTGAC TCGCCTACC TAGGCGCCTC ATCCCAGAGC AGCTCCCCAG      540
CCTCGAG                                     547

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(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

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GAATTCGGCC TTCATGGCCT ANACACTCTT CCTCTTCTCC TTTTTCCTTT AGAGATATGA      60
ATCAGGTTCT TGATGCCTAT GAAAATAAGA AGCCATTTTA TCTGTACACG GGCCGGGGCC      120
CCTCTTCTGA AGCAATGCAT GTAGGTCACC TCATTCCATT TATTTTCACA AAGTAAGTAT      180
NGGATCTTAT GGCTTTTCTT ACTCTCTTAG TGAATTGAGA ATGTTGCTTA TAAACCATGT      240
TTAGAACTGA CAAGATCATG CTAGTTCATT TGCTGAGCAA CCAAGATGTC AAGAGTTGGC      300
ACTTTTTTGG CTCCATTCA CTTGTTCCT GGGCTCACTT TAGAGGACCA TGGAGTGATG      360
GGGAGAGCGC AGCTTTGGAG TCAGCCAGGC CTGCTCCTCT TCTCATCCTG CTCCCTGTCT      420
GCATGGCCAT GGGCCTGCTA CTTCTCTGAG CCTAAGTTTC CACATCTGCA AGATGAGAAT      480
GAAGATACCT ACCTCATAGA ACTACTGTAA AGCTTCAAAA CAAAGTGTGT AGAGCAGCTA      540
ACACAGAGCA CACAGGGCCA CCTGGTCGAT AAATGGTAGT AGACCTTATC ATTATCCATA      600
GTCCCTCGAG                                     610

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(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

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GAATTCGGCC TTCATGGCCT ACTAACTCTC CTTCTCAAAA CACCAAAAGT AAATTTTAAT      60
ACCCAAAACG AAATTCATTT TGTTAATCAC AGCTTAGAAG GTTTCATATG ATCTGGCCAA      120
ATCTGTATCT TGCATCACTC TTATCACTCC CCCTCTCTGC TCACTGTATC TGCATGATAG      180

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GAATCAGCTC ATCTTCCTAT ACATCAGTAC TAAACAACC TCACTCCTAC CTGAGGCCCT	240
GTGTGCTGTC TGTAGATGGT CCATCTTCTC ACTTCACTCA GGACTCAAAT GTCCCTCTT	300
CACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:921:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 293 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GCAACCGGGT TTTGCCAGGG CCTATTGCAC CAGAGAGCAG CAAGAAGCGG GCCCGTAGGA	60
TGCGACCAGA CCTTTCTAAG ATGATGGCCC TCATGCAGGG TGAAGCACT GGGTCTCTAT	120
CTCTGCATAA CACGTTCCAA CACAGCAGTA GTGGCCTACA GTCTGTGTCA TCTTTGGGTC	180
ACAGCAGTGC CACTTCTGCA TCTTTGCCTT TTATGCCATT TGTGATGGGT GGTGCACCAT	240
CATCCCCTCA TGTAGACTCC AGCACCATGC TTCATCACCA CCACCACCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:922:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 492 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC TTCATGGCCT AGTGGGGCCT GTTTATAGTT GACTGACAGT AAGTTCTATA	60
TGGTATATAA CACTAATTCT CTAGTCTTCT GGGCATATCT ACGAACAAAT ACAATCCAAA	120
TATTATGAGT AACTGGGTTG TGACCACTGC ATGCATTACA CTGAAAGAAA CACCAACTCG	180
AAGCACAAAT ATATTATTAT TATATTTCCG CTCAGCTCTC AGTGGGGAGA GCAGCTACCT	240
CGGACCACAA TGCCATTTAA ACCAGATTCT TTTCAAATAA AATTCTCAAT CTAAGTGGAA	300
AGCCCCCTCA GAGAATGCCT TATTTCCCTA CTAAGCAATC CAGGCTTGTA TAAACGCTCT	360
GATAAGGCCT GTAGTGCCCA TTGAGTATGA GTCTGCTGTT TACATTCTGC ACAGGCCAGG	420
AGGGGAACAG AAGGTGTGAG CCACAGGTGC TCCTGGGTCT GACCAGCAAG TCTAACCCAT	480
GAAGATCTCG AG	492

(2) INFORMATION FOR SEQ ID NO:923:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 650 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

AAATAACCAC AAATATNAAG AAATTATAAT CAGGGCAACA GATTAAAATG AAAAGGGGTA	60
TAGAAAGATA TATTTTAGAT AATATAAACT CCTGACAAGC TATGCCCTAG AATTGCAGCC	120
TCCAAACCTT GCCCANGATT TCCACCTTTC CATAGCCTCA CTTCAAGTTC AAATGGAAAT	180

GAAAACAAAA TAAAGTGAAC AGGTGGTTGA GCCAGCCNAA GCCTCCCAAG TTATGTTAGG	240
TGGACAGTAA GACCAGGTGG ACAGCATTG AGAAACTGGC TGGACACAGG GGAGCTGCTA	300
CTGGTAGTTA TATTTAATTT GGAGGAATTT CCAGCCCCT GATAAAGAGA GAAACCAAGG	360
AACCAAATGA CTTTTCTAGT AACATATAAT ATATGAGATG AAATATAATT CTGTTAGAGA	420
GGACATGGTG GTGAGATGGG AAAGAAAAGA GAAGAGAAAC AGGCAGACTT CGGGCACCAT	480
CTCCCTTTGT TTTCTACAAT GCATTGGTTT CCTTCTGTTG CGGAGCATTC TTTAGGATTA	540
GCTACAGACC CCAATGTCCT CTGAGTAAAT ATATGTCAGC TCAGCTCCTG ACATGATATC	600
CATGCTTATT GGCCTCCTGG AGGGCTGGGT GGTCTCAGG GTCCCTCGAG	650

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

TGAGCTGCGC TAAACTCCAC CGTGACCTCA AACTCTTTGG ACTGTTTGAA AAAAAAAAAA	60
NTNGGAAGAA ANTCCATCCT CCAANANAAT CGGCTTAGGA GGAGATGGAA CTTTNNCCCT	120
TTCTCTNGGT TTTGTCCGTC TGGTGGTCTC GAACCTGGGA TTCGGCGAAT GCGGATTCGA	180
TCATTACAT CGGAGCAATT TTTGATGAAT CTGCCAAAAA GGATGATGAG GTATTTTCGA	240
CTGCGGTTGG TGACCTTAAC CAGAATGAGG AGATCTTACA GACTGAGAAA ATCACATTTT	300
CAGTGACGTT TGTTGATGGC AACAACCCCTT TCCAAGCAGT TCAAGAAGCC TGTGAACCTA	360
TGAATCAAGG CATCTTGCC CTGGTCAGCT CCATTGGCTG CACGTCAGCA GGATCCCTCC	420
AGTCTTTGGC AGACGCCATG CATATCCCC ACCTCTTCAT TCAGCGCTCA ACAGCTGGGA	480
CCCCAAGGAG TGGCTGTGGA CTCACCCGGA GCAACAGGAA TCTCGAG	527

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

GATTGGGCCT TCATGGCCTA GAACTTTCTA CTTGGACAAC TAACACCCAC AGTCCTCCAG	60
ACAGAAAGAC AACAGGTACA AAGCCCTAAG GATTATAAAG GTATGCTGCT TACCATCATC	120
TTAGTGACCA AGGCAGCGAA GCTGTTTCTG TACCTTGGAA CAGTCTTCCC TGACAAGCCA	180
GAGAACAGTG ATAAAGCCAC CAGCCTTGGG ATCAGGACTG AAAAGGCAAG AGTGATGGAG	240
ATTTCTCCTG CGCTAAGCCA AGAGAAGGTT TCAGCACTTC AGACAGCTCC CACCGAAGTA	300
GCCGATCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

GAATTCGGCC	TTCATGGCCT	AAGATGTTTG	TCTTTATCCA	GTAAGGTGTT	TGTATGCTCC	60
TTAAGTGGCA	GCGGGGAGTG	AGCAGAGCAG	TGAAGATAAA	CATGAAAGCT	GGTGGTAACA	120
AATCCTGATA	CCTCCTCTAT	TCCAAAAGGA	AAGGCAGAAC	TCAGAGGCAC	CATCCTCCTG	180
TTGTGTTTGC	AAGCTGTTGA	CACAACCTGG	AAAGGTTAAA	AGTTTTCAAC	AGACTTGTCA	240
GAGTTTGTGT	TCAATGGAAA	CTGACAGAGC	CTACCGGCTG	AGGGGCTAAT	TTTAATAGAA	300
ATAACCTAGG	TGCGCGCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:927:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

GAATTCGGCC	TTCATGGCCT	AGTGGAACTA	GACTGCCAGC	TGTGAGCCTC	AGAGCTCCTG	60
GCTGCCTGTT	GCTGAGTCTA	TCAGCTGCTG	AGCCTTTCTC	ACCNNAAAAA	AAAAAAAAAA	120
AAAAAAAAAN	TGNGCTTAAT	AAAATAACCC	TGCACAGAAA	TTTTCTGAAA	TTAAGATAAC	180
ATTCAATGGA	AAACAGAATT	TAATCTACAG	AAATACACTT	CACAGATGTT	TTAGGAACAG	240
AACCTAGAGA	AAATGAAAGT	CAAAATTATA	TAAAAGAATT	TGTCAGGAAC	TTCAAGGTAA	300
AGACTCCATG	TATTTTTTGG	CAACTATAAA	ACACTAAGAA	GGCTTTTTTA	ATATTAAAAA	360
GCCATTAAAG	CACCTCAAAT	TAAGATTCCCT	CAATATACTT	CAGATTTCTG	TACTGAGTTA	420
CCCTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:928:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 498 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

GAATTCGGCC	TCATGGCCTA	CGTTAGTGTG	TGGATAGTAT	GTGTGTGTCC	GCACTCATGA	60
TAACTTGAAA	CCAGACATAG	GGTTCATTTT	TGAAAGGTTA	AACCACACTG	TTTCAGGAAC	120
TTGCTCCAAA	TACTACTTGG	TTATCCCTTC	CTTTACCAGT	TAGAACTAAA	GAGTGTGATG	180
TATGAACACA	CTGGGTTGGG	ATTTTCTGTT	GAGGATATGC	AGGGCATTTC	GGCATGAGGC	240
AAATACAGAA	GCAAGATTTC	ATTCTACTTG	GTGATTTGAA	TCATGACAGT	CCTCATTCCA	300
ATCTCTCTTT	AATTCTCTCT	GGCCCTGCCC	ACACTCTGTA	TTTGAAAATC	TTGTTTTTGC	360
TCTTTCCGGA	GCTTCACCCC	TCTACTTACA	TATTGTAAAG	TTGTATAAAT	CTATCATTGA	420
AAGGTCCTCT	CTGCCAGCAG	TGGTGCCACC	CTTGTTTGTG	CTGTGGTACT	TTGCTGTGTA	480
CTCCGTGGCA	TACTCGAG					498

(2) INFORMATION FOR SEQ ID NO:929:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 566 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC	TTCATGGCCT	AGTTAAGGGC	ATTTACTCAT	GTTGAACCTA	GTTTATTTTA	60
CAGTATATTT	GTATGCATAG	AAGATGGAGG	TCCACCAAAG	TGTTAATTAT	GCTTAGTTGT	120
AGGTCAGGTA	TAGCTAACTT	TCCTTTTTTA	ATATATATAT	TTACATTTGT	GTTTCCTTTA	180
TAATTTATGG	CATAGATTGC	CACGATTTTC	TTAAGTATAC	TTTATAATC	AGAAAAATGA	240
TATTAAGGAC	TCATTTTAAG	TACACTAAAT	CAAATATTAG	AAGGCTTCTT	TATTTTAAGC	300
TAATTGTGAG	GATTATTTGT	CATTTAAAAC	TTTTGCTTCT	ACTTATTACC	CTGAAGTATC	360
TTTGTGGTGC	TTATGTTTTT	CACAGACTGT	ATAAATTGAT	ATACTCTCCC	GCCCCATGGT	420
AATGTTGCTA	CACATAAGCT	CTAATAATTA	TCATTTTTTA	TGTTTTAAGA	TTAATTCAAC	480
TAAGTTTAA	AAATAATCCA	TTGGTTACAT	ACATAAGAAA	GTACTGTATA	CAGATTCCCC	540
TGACTTATAA	TGGTTCGACT	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 506 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GTGATATGAC	ACTGACAGAA	TTCAAGTTCA	TCTGGTACAT	GGAGTACTCA	CACCGAATGT	60
GGGGTCGCCT	TGTAGGCCTT	GTGAACATCC	TGCCTGCTGC	CTACTTTTGG	AGAAAGGGCT	120
GGCTCAGCCG	TGGCATGAAA	GGACGTGTTC	TTGCCCTCTG	TGGCCTCGTC	TGCTTCCAGG	180
GTCTGTTGGG	ATGGTATATG	GTGAAAAGTG	GACTAGAAGA	AAAATCAGAC	TCCCATGACA	240
TCCCTCGGGT	CAGTCAGTAC	CGCCTTGCTG	CCCACCTGGG	ATCAGCCCTG	GTTCTTTATT	300
GTGCCAGCTT	GTGGACCTCA	CTGTCACTGC	TACTCCCTCC	GCACAAGTTG	CCTGAAACCC	360
ACCAACTCCT	ACAGTTGAGA	CGATTTGCTC	ATGGAACAGC	AGGTCTGGTG	TTCTTTACGG	420
CCCTCTCAGG	GGCTTTTGTG	GCAGGGCTAG	ATGCTGGGCT	TGTTTATAAC	TCCTTTCCCA	480
AAATGGGAGA	ATCCGGATCC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:931:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 271 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GGGAAATTAG	AAAGGGAGGG	CCTGAGTTGG	TTGCTATTCC	TGAAAGTTTC	TTTGAATGGA	60
ATACTGGATC	ATCGTTTTTG	AAGAGGTCTG	TTGTTACTTC	ATTATTACCT	CCTTTAGCAG	120
CACCCTTGTT	TTCTCCAAC	CTCTGCCAAG	ATTAGTGTCC	TGTGTCTACA	TTTGCCCCTT	180
CTGTTTCTCA	TACTCCCAGA	TGGAAATATT	ATATTTCTTA	GGACTTTTCG	CTCTATTTGA	240
ATTAGTATTT	TCTACTCGAA	ACACCCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:932:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

```
GAATTCGGCC TTCATGGCCT ACATTTACTT TTGTTACACA GGGCACTACT TTGATTTCTA    60
TTAGTGCTGT TTGTGATTGT GTATGTCCTT CACTTGAAAT CCACCATGAA GGTGAAAATT    120
TGTTTGAACC GTGGCACTAT ATGGCAGTGC AGTGTAGTCA GTTGTGTTTG TAGTCCGGAT    180
TATCAGAGCT TGAATTCTGG TTCTGCTGCT CACTAGCTTC TTCTTGACA CTGTTTCAGT    240
GTACTCAGCC TCACCTTTTA TTTTATTCT ACAGAGTCCC ATTTGGTGTG TAAGCTGGTC    300
TCGAG                                         305
```

(2) INFORMATION FOR SEQ ID NO:933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

```
GCGGTGGCAC GATCTCGGCT CACTGCAACC TCCACCTTCG TTCAAGCGTC CACCATGCCT    60
AGCTAATTTT TTTGTATTTT TGGTAGAGTC AGGAGTTCTG GACCAGCCTG GGCAACATGG    120
CAAAACCCCA TCTCTACTAA AAATACAAA TGTACTCAGG CGTGGTGGTG CCCGCCTGTG    180
ATGCCAGCTA CTCAAGAGGC TGAGGTGGGG ATCACCTGAG CCCAGTATGT CGAGGCTGCG    240
GTGAGCCATG ATTGCGCCAT TGCACTCCAT CCGGGTGAGA CTGAGACCCC GTCTCCAAAA    300
AAAAAAAAAA AAAGAAAGTG AAATAATTG TGGACAACAC AGAATTACAA ACTTTTTATT    360
TTGTCTTTTT AAAGTTACCA CAAATTGTCA CCACCATCT CTGAAAGGAC ATTAACACCT    420
GAATATATTT AGTTTCATGA AAATTTCACT TTTAACTC GAG                                         463
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(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

```
GAGCATCCTG GGGAGCACCC ATTTCTGGG AACAACTGA CCCTTTGCG TCCTTAAAAA    60
AAGTCGGCCA AGATTCCATA GTGCTGCTGA TCTGCATTAC AGTGTTTCTC TCCTACCTAC    120
CGGAGGCAGG CCAATATTCC AGCTTTTTT TATACCTCAG ACAGATAATG AAATTTTCAC    180
CAGAAAGTGT TGCAGCGTTT ATAGCAGTCC TTGGCATTCT TTCCATTATT GCACAGACCA    240
TAGTCTTGAG TTTACTTATG AGGTCAATTG GAAATAAGAA CACACTCGAG    290
```

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC TTCATGGCCT AGTTTTGCCC GGCAGCCTCT CAGGTTGGAC TTCTCAGGAT	60
TTGCCATTG TTTTAATCCC TGAGACCACA CAGTTGATGT TTAGAGCCTG CCCTGCATGT	120
GATCGTTCCA GTGGAGGATA CAGCATGGGG TCTGGCCTCC AGCAGGGTCC TCCCCAGGCC	180
ACCCCTGGGT GCCGGGAGGG CAGCCCCTTG GCCTGAGGCC CACTATGACC TGCCCCCTGC	240
AGCTGCACCG TGATGGTGGC TTGCCTTTGT GGCTCCCTGG GCTCTGGTGG CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:936:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GTTTAATGAA GAGTAGTCAG TCTTCTAGAT TGTTCTTATA CCACCTCTCA ACCATTACTC	60
ACACTTCCAG CGCCCAGGTC CAAGTCTGAG CCTGACCTCC CTTGGGGAC CTAGCCTGGA	120
GTCAGGACAA ATGGATCGGG CTGCAGAGGG TTAGAAGCGA GGGCACCAGC AGTTGTGGGT	180
GGGGAGCAAG GGAAGAGAGA AACTCTTCAG CGAATCCTTC TAGTACTAGT TGAGAGTTTG	240
ACTGTGAATT AATTTTATGC CATAAAAGAC CAACCCAGTT CTGTTTGACT ATGTAGCATC	300
TTGAAAAGAA AAATTATAAT AAAGCCCCAA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:937:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GAATTCGGCC TTCATGGCCT ACATAGTTAT TCAGATTTAG GACCAGTAAG GATAGAAGTT	60
TCTCTTATTT ATGAAAAAAA ATGCTAATAA TTTTGGGGCA GTTTTTTCCN TTAATTATTT	120
TTTTCAATTT CAAGTTTAAT TTTATTTTAG CTGATCTGAT GTGGTTTCAA CTAACCCAAG	180
GTCTCACCAT GTTAAAANGC CGGCGGACTC TACGGCGTTT TGTAGATCCC CCCCCCCCAC	240
CCACTGTGAA GGGGTGCCAT ACTACCTTAA ATGCTAATGC TAGATATGCA ACCCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:938:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 403 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

CTCGAGTGGT	GTGTCATTAT	AGCGGACAAA	GGTCACGATC	ACAAAGGTGG	TGGCGATGAT	60
TCCCAATATT	GCAACAAACA	CAGGCACAC	AGCCCAGGGA	GAATGCCACT	CCAATTTGAT	120
GATGGGGATA	AGCTGGCAGC	CTGTGCGGTT	CATGTTGGGT	CTCTGATCCA	GAGGGCAAAG	180
TTCACAGGAC	AGCTCATCCA	CCTGGTAGTT	GTAACCTCA	CAGCGTTCAC	AGTGCCAGCA	240
GCAAGGGACC	CCTTTCACCG	TTTTCTCCT	CTCCCCTGGC	TTACACGGCA	GGCTGCAGAC	300
AGACGCCGGG	TGAGTATGTT	CTCTATGAGC	CCACTGCATG	TCTTCCACTT	TTAGATGAAG	360
CTGATTGGTC	CAGTGGCCGA	TGACTTTGTA	CTCTGTGCTT	TTC		403

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGCC	TTCATGGCCT	AATTCTTTTC	TGTCCTTCAC	ATGCATGTCA	CAGTTCATCT	60
CACATTTCTG	TGTAGAGGGC	TCCATTTCTC	TGCATATGGC	ATTACCATTG	TGCCTGATGT	120
ATTCCAATTC	AGATAAACAT	AAGCTCCTTT	CTCGTGCTTT	CCCTGAGACC	CCTGGTGTGG	180
ACTTCTCTAA	TGTTCTCATA	ATATCTATGC	ATCTCTCTAT	GATTATACCA	TGTTATACTC	240
TGTGTGGCCT	TAGGCTTTGT	GAGGAGAGGT	TCAGAGTAGG	TTTGCTCTA	GAGTGTGGTC	300
CTTACTCCTA	AGGTGACCCC	TTTCNGGTGT	CTCTGCTGGT	GTATGGCATT	AATGTGATTG	360
CTTCACTCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GCAAGCTCTA	ACCTAAATCA	CAGAGACATG	CATGTTTCAT	GCATTAAACAC	TGATTTGCT	60
CTGTGGCCCA	CCAGAGGGGT	GGGCTCATGT	CCCCTGACTC	CTCACATGAG	TGCCTCAGCT	120
CTAAGNCCCG	TGGAACGGGG	GGTAGGGAAG	GTTTGCGATC	TGGAGCTCAG	CAACTGGCTC	180
AGCAACGTTT	TCTCCATTTT	ATTAGCACTA	AACAAGTTTC	TTGCTCTCAG	GAATTTGTCA	240
GAAGAAAGAA	TAACATCACC	TGAGACTCCA	CATACCAGAT	TATAAACTCT	TTCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	TTCATGGCCT	AGGTTTCCGG	ACACTTGGGA	CACGCGTTTC	CATCCTGGCT	60
CACTGAAGCC	TCGATCTCCC	AGGCTTTCTT	TGACGGTGTT	CCCTCAAAGA	AAGAGGCCCA	120
AAGCCCTCCC	CCGCAAAAAA	AGCCAGAAAG	GAATGGAGGT	GCCTCCGCAG	AAATCCAGAG	180
CATCTGCAAG	ACATCCTCGA	ATTCTAGACC	TGCCTCGAG			219

(2) INFORMATION FOR SEQ ID NO:942:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 572 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCGGCC	TTCATGGCCT	AAGCAAGATG	GGTCTGAGGA	TACCTGTGAG	AAGTAATTCA	60
ACACATCTTT	CACACATGGG	CCAATTTGCT	GGTCTAAGTT	AAATNGGAGT	GACAAGGACA	120
GCTGCTTAAA	GAGTGAGTTC	TAAAGCCCCA	GGAATTAGGT	GATGTCTTGA	GCTGGGGTGA	180
AGCAAGNCAA	GTGGGATGGG	GAAGAGATGG	CTGGNTTCTG	CNGGAGTGAG	TTTAAGGGAG	240
GAAGGCAGGG	TTGCCCGGCA	GCCCGCATGT	TCCAGAAGAG	CCCACGAGAG	ATGTCTGTCC	300
CACAGGGCTT	ATAGCACNTN	GCANTCCNTC	AAAGGGCGGT	GTCTCATGTC	CCNTCTGTTA	360
GGCTCTGGGT	GGGCTTTTGT	GACAGCTTTG	ATAATGTTCT	GGAAGAGATG	CTGCTGGGCT	420
TCTGGGCTCC	CGCGACCCCT	TAGAGAAAGT	GGTGCAGCTT	CTCATTGGCT	CTGTCTCTCT	480
CCGAACACGC	CCCTTTTGA	GCCCTCTGGA	AAGGAAGACA	CTGAGCAACC	AAATAACATA	540
TTTTGACACT	AATTTCTCTGA	GACCGTCTCG	AG			572

(2) INFORMATION FOR SEQ ID NO:943:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC	AAAGAGGCCT	AAGGAAATGT	GTGTCTCTAA	AACAGATTTG	GATTTTATTT	60
ATTGGGGACA	TATAAAAGAG	GAAGGAAGAG	TTGATAAAGA	TTCTTATTTG	ACTCTTCAAA	120
GTCACTGTTC	ACCAGAAATT	CAGAGAAATCA	ACATACAAAT	TACAATGGTA	GTTTGTTTTC	180
TGGAAGGCCA	GTGAAATACA	GCTCCTTAAT	TTATAATGAA	ATTTACTTTC	TAACAAATTA	240
AGTCTTTCTA	ATGAGACCAA	CATTGAGAAT	TCAGCCCTTA	CCTCGGGATG	GTCTGAGAAA	300
ACCAAAAGGC	CAACTGTTTT	ATTGCTTTAG	ATCAGTTAGG	TGATGATAAC	TATGAGCATT	360
TATAATAATA	TTTTAAATTG	GCCCTGAGAG	GCTTGAAGAC	ATAGAACTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:944:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 521 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC	AAAGAGGCCT	ACAAAAAAAA	AAAAAAAAAA	NNACTTGAAC	TGAGACCTGA	60
AANNGTAAAA	CTANNGNAAC	AAAACCTAGG	GAGAAAGCTT	CTTGACATTG	GCCTGGGCAA	120
AGATTTTTTT	GGATATGGCC	CCATAATGAC	ATAGGACAGG	CAACAAAAAA	AAAAATGGAT	180
AAATGGGATT	GCATCAAACT	AAAACCTCTG	ATAGCAAAGA	AAACAATCAA	CAGAGTGAAG	240
AGACAACCTA	CAGAATGTGA	GAAAATATTT	GCAAACCACA	CATTTCATAG	GAAATTAATA	300
TTCAAAATAT	ATAAGGAACT	TATGTAACCT	AATAGCAAGA	AAACAAATAA	CCTGATTAAA	360
AAATGAGCAA	AGGTCAGTTG	AGAGAGGAAG	AGAAAAACAA	TATGAGTAAA	AGACTTTAAT	420
AGACCTTTCT	CAAAAGAAGG	TATGTGCATG	GCTGATCTGT	GCATGAAAAG	GTACTTAACA	480
TCATTAATCA	TCAGAGAAAT	GCAATTAAC	ATCATCTCGA	G		521

(2) INFORMATION FOR SEQ ID NO:945:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

GAATTCGGCC	AAAGAGGCCT	AGGTACACAA	AAGCAAACAG	AAAACTCTT	AAGTTTTTCT	60
GCAATACTAA	AGAAAGTGAG	ATAAGACTTT	AAAGTTAAAG	ATCTATAGAC	ACTTTAGGCA	120
AAACAGGCTC	ATAAAGCAAT	TAAAAAATCA	ACAATTTAGT	AAAAACAGGC	TACATAGTAT	180
TTTGTTTTTA	CGTTTCATTT	GTCTATTGAT	CTTTAAATTA	AATTAGACAT	TTCTACTGTT	240
TTCTGTACT	CTTATACACA	CCTGTTTTCT	CCAATGTTCT	CCTTTAGTAT	GGCTGTAAT	300
TGTTTTGGTG	ATTGCCACCC	CCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:946:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 573 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

GAATTCAAGG	GCTAGGCGAG	TTATTGCAGT	CACGTCCTTA	AGTCAGCCGG	GTCTCTTCT	60
TTTCCCTCAA	GGTGCCTGTG	TTTTCTATTT	CCCCGTCCAG	TCGGTGGCCC	CACCCAGCCC	120
CAGGGTGCTC	CCTTCCCCCC	TTTCGGGTTT	CTGCCTGGAG	GGTGTGGTTT	TCTCTCCAC	180
CTCGGTGCCT	GCCAGTAGAC	TGGAGTTCCC	CGCCACGCTG	TCGGTCCCAT	CTCATCACCT	240
TTCCGCTTTC	ACGCCCGTAG	CTAGTCTTGG	GACTGGCCCT	GTTATAGCCC	CAACTTATGC	300
GCTCTCTAAC	CTTTCCTGGC	TTACCCGGAG	TCACAGTTCA	GTTCTACTTC	TTTTCAATTC	360
TGTAGGGCAT	TGGTCTCAAT	TGGGACTCAG	TTTTCTCCA	CACCCGCCGT	TCCTGTAGTC	420
TGGTTATATC	ACAGTTTCAAT	ATTAAATGTA	GGTTTTTGAG	CGCTTTGTAA	ACGGCAAAGC	480
TCTCTCTGTT	AATAATACAT	ACTCAAATG	TTATTCTTTC	ATTGGTGCAT	TACAACTCAG	540
TGTTTTGCCT	CTGAATCACT	TTCCCGACTC	GAG			573

(2) INFORMATION FOR SEQ ID NO:947:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GTTGAAGTCA TTTATTATTT TATAAATTGA GAACAACCAC ACCACCAAAT GTCACACCTT      60
CTTATAAAGT GTGAACAAGG AAGGTCATGT TTTTGTGGGT ATTTTGTGAG ACTTAGAGGT      120
TTCATTTCAG GGCATAGTCA AAGGCATCAT CCTCCCAACT ACCCACTTGA TTATGTATTT      180
CAGATCCCTC CGTGGGGGCC TTCTTCTGAC AGAGAATTCT TTGAGGTACG CAGTAGTGCT      240
TTTGTGAGCA CAGACTGCTA ATCTACATCT TGCTGCGTTC TGTTTGCTGA GGTGGGGCTT      300
ATTCATTAA CACGTACCAA CCATTATCAC TCGAG                                     335

```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```

GAATTCCGCC AAAGAGGCCT ACGGCCAAAG AGGCCTAGTC GGAGGAGGAA ACATATGTAG      60
GGAACAGCCT GGGTCTGTG AATCCGTTTC CCAGCTATGA TGCCTATTTC CTCAGCAGAA      120
TGAGTGTAGC ATGTCTCCA GGTCTGTTT TTATTTGTTT GAGAGGTGAT TTCAAGCAGA      180
ATCTCACAGC TTAGTGTGG AAATGCTATC AGTTGTAAAG ATAGGGAAAA TCTCTCTTCC      240
ACTACGGTGG TAGGAAATGA ATACATATCA TTTCCAGCT TCCAGGATGT CCTGTCTATCT      300
TAACTGTGCG TCCCAAGGA CCTACAGATC ACAGGGCAAC AGGGGCTGTG AAAGAGTAGC      360
CCGGGGCTCG AG                                                             372

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(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```

CTAGCATTAC GAATCTCTTA GGATTTTAA GATTGTATTT GATAATACTT ATATTTTACA      60
GGGCACACTT TTGGCACACC TCAGAGCACA CTGCTGCTAT TTTGGGTCAT ATCACTGTAA      120
AATACATAAT AAGTACTACT TAACTGTGAC ATGAAGAATT GGAATCCCAG AGGGCAACAT      180
TTGATTTCGAC TAAGATCAGG CATAAGATAG AATTTTGTG ATTTTTCCTT GCAGTTTAT      240
TGACTTAGTT TATGAGCTTG GATAAAATAA TTTTGTGATG AATCATGTCA ATAAAGGAA      300
AAATAATGTA ACTACCTCAT AAGTCTGATA AAAGGAAGTT GCTAGTGTTC TATAGAATTT      360
CTGAAGGTGG TTAAATCAAG TATGATTCA AAATATCAAC TAGTTCCACT TTTGTGATTG      420
CAGGATGCTT CTTATACTAA AGTTCTCGAG                                     450

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(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GAATTCGGCC AAAGAGGCCT ACGTAGGCAA AGGTTGACCC AATCAAAGAT AAAAGAAAAT	60
CGACAGCAAA TCGTTCGTGC TCGAAAATAT TATGATGATT ATAGAGTTCA GTTGTGTGCA	120
AAAATGATGA GAATGAGGAC CCGGAAGAA ATGATATTTA AGAACTGTT TGAAGAAGGT	180
TTAAACATTG AAAAGCAAAG ATTACGAGAC CTAAGAACT ATGCCAAGA AAAGCGAGAT	240
GAACAAAGGA GACGCCACCA GGATGAAGT GACTCCATGG AGAACTACTA TAAGGACCAG	300
TTTTATTGTC TGGCAGAAGC CATATCACAG GAACAACTCG AG	342

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

GAATTCGGCC AAAGAGGCCT ACCCTGTTTT AATCACATGA CTACCTGTCC CAGTACACGA	60
AAGGGCGCTG GTTGGCATTG TTCTTAATGT ATTTAGTAAA GATTATAAGA CATCCTTTAA	120
GAGTTTAAAT GTCTCTGAAA CAGGCATACA GGCTCTAGTC AAGAAATGAAT TAGAGTGAAG	180
GAAAGCTGTG TGACACCTGG CATTCTCTC TGTTTCATGA GCTTCTTTGA GGCTTGAAGT	240
TTGATTTTAC TATCTAGACC TCTCTGGCTA ATACCTATTC TTCAACCACC TCGGTTACTC	300
TGACATAGGA ATTTACTTCT TTTCCTTGAG TGGAAAACAC TTTAGAAAAT AATAACAAAC	360
ATTATTATAA ACTAATATAT GTGAGAGTAC TTAGTTGAAA CAAAAGGAA TTTTAGTAGA	420
CAGTATTATA TTATCTTTGA AAATCAAGGA GAAGTTTATG CAACTGAAAA TGTTTACACA	480
CTGTGCTACT CGAG	494

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

CAAAGAGGCC TAGGGAGTGT CGCTCTGTCA CCCAGGCCGA GATTGCACCC CTGCACTCCA	60
GGCTGGGCAA CAGTACGAGA CTCTGTCCAA AAAAAATAAA AAAGAACAGC CTTTTTAGGC	120
CACAGTGACC TCGCAATGT TTATATGCTT NGACCTACTA ACTTTCTCCT AACTAAATAT	180
TTGATTTTAG GAGAGTGTTT AAATAAATTA CAGTATGTCT ATATGATGAA ATGTTATTTT	240
GCCATTAAAA TTTTGTTTAC AAAGATAATT TTTATTGACA TAAAAATNAC TTTAATGTAA	300
TTTATGTTGA AAAAGCTGAA TACAAGTCTT TATATAGAGT AATATTTGAG CTGTGTTCAA	360
AAATACATAG GAAAAGACTG ATAAAATGAA ATATGGCNAA ATGTTAATAG TTTCCCTGG	420
AATAGGATAA TAGGCAATTT TAAAACAGAC TCCTTTAAAA AAACAAACAA ACNAAAAAAA	480
CATAGACTTC TTTATATCTT TTGAGCTCCC CCCNACTCG AG	522

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

GAATTCGGCC	AAAGAGGCCT	AGTGTGTTAT	ACAGTTGTTG	CCACTGCTGT	TTTCCAAATG	60
TCCGATGTGT	GCTATGACTG	ACAACTACTT	TTCTCTGGGT	CTGATCAATT	TTGCAGTAGA	120
CCATTTTAGT	TCTTACGGCG	TCAATAACAA	ATGCTTCAAC	ATCATCAGCT	CCAATCTGAA	180
GTTCTTGCTG	CATTGTGTCA	AAAGAAATTT	CCTTATTTTC	TACTGCCATT	CCCATAAAAG	240
TAAGTAGTCT	CATTTTGGCC	ATATTCTGTT	CATGTAACAG	GCCAAGTGAA	TCAATGAAGT	300
CTTTATTATT	CTGATAAAAC	TTGACATATG	ATGCCAATTT	AGCACTCACA	AAAATGGTTA	360
AAAGATCATG	AATAAGCTCG	CCTTCCAAAA	ACTTGACTGG	TTTTAAAGTA	AGAAGGTGGT	420
CAAAAAGAAA	TGCATTGGA	TCTTTCAATG	CTCGTACAAT	ACACCTGTGG	GCATCAACTC	480
GAG						483

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 372 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

GAATTCGGCC	TTCATGGCCT	AGGTGCCCTC	TGTGAAGCCA	GTGTTCTCTG	CTCCCCGGGT	60
CAGAGGTCAC	AGGTCAAAGT	CAGTCAGTCC	GAAGAATCAT	GGGCGGGTGC	TCGCTGTCCT	120
CATCCAGGCG	CAGGGCGCTG	GCCTCGTCCT	CCAGGCAGGC	GCCACCCACA	GCACCCAGGT	180
CGTCTGTGTA	GGCTGCAAAG	AGACGACGAA	GTCACCTTC	AAAGGCTGGG	GACACACCAC	240
AGACCCCATG	ACACACACTG	AGGACTGTGT	TTTGAAACA	CTGGTGTATA	TTTATAAACT	300
GAAGCCTGTA	CTAAGACGTT	CTGAATTCTG	ATTGCTTCT	AATGAACTCT	TTGCAGCCTT	360
AGGCAGCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 436 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTCGGCC	TTCATGGCCT	ACTATTACCA	TTATATATCA	CCCATCTGCA	ACAAGGTACT	60
GTACAGACAA	GTAAGAAGTA	TGTTATCTAG	TTCCCTTTCC	CCCAGAAGGT	TGAGGCTCAG	120
GTATAGGGGT	AATTCTCCTG	TGCAGTCTTT	ATTTATGCTG	ACTCAGTGAC	TTCAACAGGC	180
TTAATCATGT	GGTCAGGTTT	GTTGCCAGCT	GCATAATGCT	CCCACATCTG	TAGATAGAGC	240
CGCTCTAGTT	CCATTGTGTA	TTGTTTGGTG	TTGAACAGAG	GGCTAGATAT	TCTTTGCTTC	300
CAGACTTTGC	CACGAACCTT	CTTCAGGTAT	TCTAGATCAG	TTCCCAGCTT	CACAGCTATG	360
TCTTCATATT	CTTGTCTGTT	TTTAGCAATA	AGCTCAAGAC	AACCTAAGCA	AGTGAGCTGG	420
GATGCTGCAA	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

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GAATTCGGCC TTCATGGCCT AAGGAGATGG GAGAATGTCC GGGGAGGGGC TGGCAGGAGG      60
GGCCAGCCAA ACTGCACGGA CTTTGCTGGT TAGTGAAGGA TTTTAAGTCC TCTAGTGGAA      120
TTAAGTGATT AGATTTTTCG CTTACAAAGG AACTCTCCT ATGGAGAACA AACTACCATA      180
TGAAGCTAGC GGCCTAAACC AGGAGAATGT GGGGAAAGAA GAGAGGTGAG GATAACTGGA      240
GGGGTATTAT GTAACAACAG AAAGCATCAC AGTTCAATGA ACAGGGCAAG GTGGGCAAAT      300
GAAGAGGGCA GAGGAGGACT GGGCCCTCGA G                                     331

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(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

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GAATTCGGCC TTCATGGCCT AAGACTGTGA GTTCTGGGGC CAAGAAAAGT TTTGAATTGC      60
TCTCAGAGAG CGATGGGGCC TTGATGGAGC ACCCAGAAGT ATCTCAAGTG AGGAGGAAAA      120
CTGTGGAGTT TAACCTGACG GATATGCCAG AGATCCCCGA AAATCACCTC AAAGAACCTT      180
TGGAACAATC ACCAACCAAC ATACACACTA CACTCAAAGA TCACATGGAT CCTTATTGGG      240
CCTTGAAAAA CAGGTCTGTC CTCCACCTGA ACCAGGGGCA CTGCATTGCC CTGTGCCCCA      300
CCCCAGCTTC CCTTGCTCTG AGCCTACCCT TCCTCCACAA TTCTCTAGGG TTCCATCACT      360
GCCAGAGCAC ACTGGACCTA CGCCCAGCAC TGGCTTGGGG TATATACTTG GCCACCTTCT      420
CGAG                                     424

```

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

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GAATTCGGCC TTCATGGCCT AGATATGGCC AGGATGCTAT AGCATTGTCA GTGAGGAGAC      60
ATCACAGCTT TCCAGATCG GGAGGAAAAA TATGGAATGT GTTTTACCGC TGAAGTGAACA      120
CAACCAAATG AACTGTCCTG ACAGTAGTTT GCAAACCAGC AGCTAGCAGT TTGTCCAGCC      180
TCTAACATTG TCCAGCACTT TCCAGAGCAA ACTCACTGTT TACAAGAACT CTTGGCCTTA      240
CGAAGTTTAT AACCTCAAGC TTTGTTTATT TAAAATATTC CTGCAAAAGA AAAGTACCCG      300
GCCCATGACC ATTCGTGACA GGCCCTTTGA ACGGACGATT ACCATGCATA AGGATAGCAC      360
TGGACATGTT GGTTTTATCT TAAAAATGG AAAAATAACA TCCATAGTGA AAGATAGCTC      420

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TGCAGCCAGA AATGGTCTTC TCACGGAACA TAACATCTGT GAAATCAATG GACAGAATGT	480
CATTGGATTG AAGGACTCTC AAATTGCAGA CATACTGTCA ACATCTGGGA CTGTAGTTAC	540
TATTACAATC ATGCCTGCTT TTATCTTTGA ACATATTATT AAGCGGTGGC ACTCGAG	597

(2) INFORMATION FOR SEQ ID NO:959:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

GAATTCGGCC TTCATGGCCT AGTGTCTTCT TGTCAACTTC ATTCTCTTCT CTTGTTTTCT	60
ACGTCTGAGA TCTTTCTGAA CACATTTTGT TAGAGGCTGC TGTCTCCTGC TGTCTGGAGA	120
ATGATCTTTA GAGGGAACGG AAGCTTTCTT CCTGTGCGTG TGTGTCTTCC TGTGCTCTAG	180
CACCTGGGGG TGGAGAGTCT CGGGGCGGGG ACACCACTGT CATCAGCGCC TCTGCTGTCG	240
TGCTTCTCTT TTGCATGTTT GGAAAGCCTC AAGCGGGAGG CGGACTCGAG	290

(2) INFORMATION FOR SEQ ID NO:960:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

GAATTCGGCC TTCATGGCCT AGTGAGTGAG TAAGACAGGT TGCTCTTTGG AAAACAAGGA	60
AAATCCCTTT ATTAGAACAA GGCATGAAAT TCTGCCACTA GGTGGCGATG CCCTATAACT	120
TTACAACTTA GTGTACATCA CACGAGCACT ATGGAAGATT TCTCCATTCT GCGCCCCACC	180
AACTCCCTCC CCTCCTTCAT TTTTCAGGAT GACAACACCT TAGAGGTTTA TGGCCATCAG	240
GAGAATTTAC TACTAAGCTA TATACTGATG TAATGAAATC TAATATATGT TGTGCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:961:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 503 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

GAATTCGGCC TTCATGGCCT ATTTTCCCTT CAGGATTGTG TGTGGGGTG GGGGCATACT	60
GGGGATGACA GAGGGAGAAA GAAAGATTTT TATTTTCCCT TCTAATAAAT GTTCATTGAG	120
AAAGTTATAG AATATGGAGA AAATGAAATT TATAACTCTC CTGCGCAGAA ATACTGTTAG	180
CTGTGAGTTT CTTTCTATA TATGCTTATA TAGTTGAGAT TATGCATGTA TACAGTTCTG	240
CATCTTAGCT TTAAAAATAA TGTCACATCT TGATAATTTT CCAGTCATTA AAATTATTTG	300
AAGATATCAT TGATGTATCA CCTTATTTTA TATTCTATTT GAATAATACA TCCAAGGTCA	360
CCAAAAGATG ACAGTGAAAT GTATTGTTTG TAATCTACAT TAGCATCAGT AAATATGGAC	420

CATTTAAATT GTGTTAAGTC AACCTCTCTG ATCTTATTTT ATTAAAGTTT AGGATAGGCA 480
CTACATTGA TGGGACTCTC GAG 503

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC TTCATGGCCT AAGCAGCTGC TGCCTGCCAG AGAGGCGCCT TCAGAGACCC 60
AGCGCTTACA CAATACCCAC CATGTCCCAG GCTGGTGCTC AGGAAGCCCC TATCAAGAAG 120
AAGCGCCCC CTGTGAAGGA GGAGGACCTG AAGGGGGCCC GAGGAAACCT GACCAAGAAG 180
CAGGAAATCA AGTCCAAGAC CTACCAGGTC ATGCGAGAGT GTGAGCAAGC TGGCTCGGCC 240
GCCCCGTCGG TGTTCAGCCG CACCCGCACA GGTACCGAGA CTGTCTTTGA GAAGCCCCAA 300
GCCGGACCCA CCAAGAGTGT CTTGGGCTGA GAAAGTGTGC CCACTCCCCT TGCTGCCCCG 360
ATGCTCGGAA ACAGGAGCCT TACCCAGGCT CGAG 394

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC TTCATGGCCT ACCCTTCATG GCCTAGGAAA CTCACAAAAT GAAATATCCT 60
TCTCAACGTC ACTAGAGAGT GGCAGAGTTT AGAGACAAAG CCATCTGATT TTGGAGCCTG 120
TGCTCAGCTT TTAGCAGACA CACTGATTTC CAAGAATTGC TAGGATGTTT CTCAGTGCAG 180
TTGACCACAG GACTCTCTGG AAAGCCTTCA GGAAGTGAAC TCCTCCAGAC AGTTTGGGAA 240
ACACTGCATG TGTCTATTAT GAAGCCATCA GCTGAGCTCA TCCCCCGTGC ACTCCACAAC 300
GCTGAGGCTC TGCACATGGC TCACCAAGTGC CAGGTGCTGC CAGTCAGCAG TGCCGTGCTG 360
TTTCCACAGC AGCCTGCATA CGTCTATATT GCCCAGCCTG TTTCACCTGG CGGGGTACAC 420
CAAACCAACC CCTGGTATTG TTAGCACGTC CACATAATGG CATCTCCACA GCTGTGTCAT 480
CCAAAAGAAA CCTCGAG 497

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GAATTCGGCC TACATCTTTT GATGACTCTG ATACCTTCAT TCATTTTCA AAGGAATTGA 60
CTGATCATGA GGTGGAAAA TCTGTATTTT TCTTGCTTAT TATGTATTAA TAATCATAAA 120

TGTCTAGATT CACCAGAAGT CACCAGAAGG TCTGTCTCAG TGAAGAAAAC TTATAAAGCC	180
ACTTTGTTGC ATTTTGTGTT TCAGTGTTAC AGTTTGAGAT CTGTATATTT GTACACAGCT	240
ATGTGTTTTT CATTGAAATA ATGTACAAAG ACTGATCTTG ATGCTGTGTA TTTTATAGAG	300
TTGTCTTAGG CATTCTGAG CTCAGCTTCA GTTGGATGGT GGGTCAGCAC CCTGCGTTTC	360
TGAACATACT AGACTTCAGT TTTAACTGC TCGAG	395

(2) INFORMATION FOR SEQ ID NO:965:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 471 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTCGGCC TTCATGGCCT ATAGTAAATG CCCACTAGGC ACCCTGGAGT CATTGTGTGA	60
GAGTGGCATC TCTATACAAC TGTTGACTA ACTGTCGGAG ACACCCTAAT CACCCAGCC	120
ACAAACAAAT AGAACATTGT ATGTGTGCTG AATCCCACAA AGGCCAGACA TGATGCCATG	180
AGACCAAGAA GGAAAAGAAA TAATGTGGAA AGGGTTTGGG GTGGAAAGGT GGGGAACCTG	240
GAGGCGGGCC ACATGGGGCC CCAGAAGCCA TGTGAGGGT TTTGTCTTCA CCAAAGGATC	300
AGTGGGAGAT TAGTGTAGAA CATTAAACAG AGGTGGGGTA TGTGTCATAT TTCCATTAAA	360
AAATTCATCC TGGCCACAGT GTAAAGAATA GATTAGGGAG GAAGCCAATC AGGAAGCAAT	420
TGGAGTAGGC AATGCAAAAG GCAAAGTGAA CTTGGACTAG TGGTCTCGA G	471

(2) INFORMATION FOR SEQ ID NO:966:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 611 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC TTCATGGCCT AAGCCAGCTC AGNTGCNTCA GAGATTTTGT GTGTCCTTGC	60
ATACACAAC TAATTTCTCT AGGATTCAGT CTCCTCGTNT TATTTTAAAA ATNATTTTAT	120
TTGTAAATAC CTCATCGTGG ACTCCAAAAG CATGTCTCCT CGTTTTAAAA ACTGGCATAA	180
TACCTACCAC AAAGGTGGAT GTGAGAATTA AATAGAGCTT TATACAGAAT TCCCTCAGGC	240
ATTTTAAAGT TTATGTAATA GGGATGTATC TTACAGTTGA TGGGTACATT TAGTGTAGTC	300
CCCCTACCTC CCAAGCTAAT AATGGTGCGT CGTACAATTG ATGGTACCAA ATTGAGGTGA	360
TAATAACATA GAAAGAGTTT AATGCAACGT GAAGTACAAA ATGCATTCAA TAAGTAGCTG	420
CTATCATTTT TTTAAAAATT AAATATGGCT GCTTGTTAAG GCCATATCCC AGGAGGAAAG	480
TGTGGTCTCT GCTGGGAGGT TGGTCTACAT ACAGGAAGCC AGATGTGTGA GATGGCTCTA	540
GATAGGCAGA AGGGGAGAGC TCGTGCCCTC TAGGAACCTA TTAATAGATA TCAAGGGAGG	600
GATAGCTCGA G	611

(2) INFORMATION FOR SEQ ID NO:967:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AATTTAAGTT	TTTCTAGCAG	ATCGCTCAGG	TTGCTCTTAA	60
CTGGAATGTA	GTGTTTCCAG	GGCTGCAGCT	CATTGTAAAA	ATGTTTCATAG	TAGATGGAAT	120
CCTGCTTCAG	CACAACACTG	TCACCAACTA	GCAAATATGG	CAGGCGATAA	GCTGCTACAG	180
TGCCATCGAT	ATTTATTTGA	TACTTATGCT	TGAAGAAATC	AAAAAATGAA	ATATGTTTCA	240
CAATGGGACC	ATACAGGTTT	TCATCGTGTT	TAAAGAAGAA	AAAGTTGGTG	AAAGCAGCGT	300
CTATGAGTTC	TGGGTGTTTT	CTACTGAGTT	TAACCAGCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 593 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATCGCCT	AGCCAGGANC	TTTCTCGGAC	GCCTTGCCCA	GCGGGCCGCC	60
CGACCCCTG	CACCATGGAC	CCCGCTCGCC	CCCTGGGGCT	GTCGATTCTG	CTGCTTTCCT	120
GACGGAGGCT	GCACTGGGCG	ATGCTGCTCA	GGAGCCAACA	GGAAATAACG	CGGAGATCTG	180
TCTCCTGCCC	CTAGACTACG	GACCTGCCG	GGCCCTACTT	CTCCGTTACT	ACTACGACAG	240
GTACACGCAG	AGCTGCCGCC	AGTTCCTGTA	CGGGGGCTGC	GAGGGCAACG	CCAACAATTT	300
CTACACCTGG	GAGGCTTGCG	ACGATGCTTG	CTGGAGGATA	GAAAAAGTTC	CCAAAGTTTG	360
CCGGCTGCAA	GTGAGTGTGG	ACGACCAAGT	TGAGGGGTCC	ACAGAAAAGT	ATTTCTTTAA	420
TCTAAGTTCC	ATGACATGTG	AAAAATTCTT	TTCCGGTGGG	TGTCACCGGA	ACCGGATTGA	480
GAACAGGTTT	CCAGATGAAG	CTACTTGAT	GGGCTTCTGC	GCACCAAAGA	AAATTCATC	540
ATTTTGCTAC	AGTCCAAAAG	ATGAGGGACT	GTGCTCTGCC	AATCCGACTC	GAG	593

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

GAATTCGGCC	TTCAAGCCT	AGTTTGTTTG	TTTTCGTTTG	GTTAAAGCTT	ATTGCCATGC	60
TGGTGCGGCT	ATGGAGACTG	TCTGGAAGGC	TTGGAATGGT	TTATTGCTTA	TGTTAAAATT	120
TGCCTGATTT	CTTACAGGCA	GCGTTTGGAA	ACCTTTTATT	ATATAGTTGT	TTACATACTT	180
ATAAGTCTAT	CATTTAAAGA	CATGTACTGA	AACAAATGTA	TTTGTTTCAT	AAGCATCTTC	240
CTGTAATCTA	TTATAAAATT	GAAATTAAAT	ATAGAGAATG	TTTAAACAAT	TTTTTAACTC	300
AAAATTTGTC	AATCATTTTT	AATAGTTCTT	TTTTTATAAA	AAGAAAAAGG	AATTTAAGGA	360
CAGGCAGTAG	TCTCTTTTAA	AATTTATTCA	CAAAACCCAT	TAACTCGAG		409

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC TTCATGGCCT AAGATTATAT AAGATTATGC CAATAAAACT CATGCCTGAG      60
GAAGTGGTTG CTCCCTTTCT ATGGGTCAGT ATTGGTGCAA GAACTGGAAA CCAGCCCTTG      120
GAGAATAGTT ATACATTGGC CATGATTTTC CACAGCCCTG GAAATGCACA ATTCTATCCT      180
CCTACCAGGA TGATTGTTAA GTTTTAGCTA ACATTGATT ATAAAAGGCC GTAAGTATGA      240
GTATCTCTGA GATAATTTGT GTATTGGAAA GAGGTGTGTA ATAGCACTTT TTTAAAAAAA      300
CCTAGGTGTG AAGGAATTAC AAGTCCAGAA GGCTCAAAAT CTATAGTGA AGGAATCATA      360
GAGGAAGCTC GAG                                         373
```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 656 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GTGGAAGTCC TGACCTCAGG TGATCCGCCC ACCTTGGCCT CCCAAAGTGC TGGGATTACA      60
GGCGTGAGCC ACCACGCCCC GCCTATCTCT TGTTTTAAA TCAGTCTAGG GTGCCAAAGC      120
ATCAGGGTTC CCGGCCTGCA AGAAAGGGAG ATTCTGTTC ATGTTAAAGT GTCATATTTA      180
TGAAACTGCC CTTTTTGGA TCTTTGAGGT TGTCTGTACT ATAGGACTGG GGAAATGCAA      240
GTGAGTCTAA GAAGAAACCC AGATGTGTCC TACCCTGGCT GGCAGTAGTG AGAAGGGAGG      300
AAGTTCTTCC TTGGACACTA GTACTATTGG AAAGTTCCTT ATGTCTGGTT CACTGATGAA      360
GCTTGAGGAT AGAATTGGTG AGGAGGGAGG GGAGAACAGG TCACAGCTGG AGGGGAGCCT      420
GGGCCCTATA GGGTGTGAGG CAGAGCAGAG TGGCAGATAG GACATGTGGA CGGTGGGGAA      480
AATATTCCTC ATGGGACAGA AGATACCTGG CACATGTACC CACAACCTGT ACACAGATGA      540
TCTGTACTGG ACACACGTGG AGATATGGCC ATGCCACGCA TGTGCAACA GAGGTGTACA      600
CACAGGAGTG CAGTGATACA GGACACAGAT AACAGAATG TACACAGCTT CTCGAG      656
```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GCAGGAATAG AGTTGGAGCG GTGCCAGCAG CAGGCGAACG AGGTGACGGA AATTATGCGT      60
AACAACCTCG GCAAGGTCCT GGAGCGTGGT GTGAAGCTGG CCGAACTGCA GCAGCGTTCA      120
GACCAACTCC TGGATATGAG CTCAACCTTC AACAAGACTA CACAGAACCT GGCCCAGAAG      180
AAGTGCTGGG AGAACATCCG TTACCGGATC TCGTGGGGCG TGGTGCTGGT TGGTGCTCTG      240
CTCATCATCC TGATTGTGCT GCTGGTCGTC TTTCTCCCTC AGAGCAGTGA CAGCAGTAGT      300
GCCCCACGGG TCCTCGAG                                         318
```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GGAAAAATAC	AAAAATTAGC	CGGGTGTGGC	GACGTGCGCC	TGTAGTCCCG	GCTATTCAGG	60
AGACTGAGGC	AGGAGAATCG	TTTGAACCTG	GGAGGTGGTG	GTTGCAGTGA	GCCAAGATTG	120
CGCCATTGCA	CTCCAGCCTG	GGCAACAGGG	TGAGANTCTG	TCTCCAAAAA	AAAAAAAAAA	180
AAAAGCTGGA	TTACAGGCGT	GAACCACCGC	ACCCAGCCAA	TTCATAGGTG	TTTAAAGTGT	240
GACACTTGGA	TGGTTTAAGT	CTGATAGAAC	TTTACATTTT	ATTATACATT	TAAATATATA	300
CCAGGGGCTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 372 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC	TTCATGGCNT	ATTCTTCGCA	GATTATGAAG	ACTACATTAA	ATGCCAGGAG	60
AAAGTCAGCG	CCTTGTACAA	GAACCCAAGA	GAGTGGACGC	GGATGGTGAT	CCGGAACATA	120
GCCACCTCTG	GCAAGTTCTC	CAGTGACCGC	ACCATGCCCC	AGTATGCCCG	GGAGATNTGG	180
GGTGTGGAGC	CTTCCCGCCA	GCGCCTGCCA	GCCCCGGATG	AGGCCATCTG	AGCCTCCAGA	240
CCAGACCCCA	AACCAGCCCT	TGAGTCTGTC	ACACTCTCTT	GGGCCAGCCC	CAGCACCTCA	300
TGCAGAGGGT	GGGGTACTGG	AGTTAGATCT	CTAAGCCCCT	CCTGGAACCC	TCATTTTCCC	360
CACGTGCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 449 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC	TTCATGGCCT	AAAGGATTTG	ATTCAGAGTG	ACATAGCTGC	TCTCCATCAC	60
TTTACTCCA	AGCATCTCGA	ATTCCCTGAC	AATGATAGCC	TCGTAGTACT	CTTGCACAG	120
GTTAACTGTA	ATGGCTTCAC	AATTGAAGAT	GAAGAACTTT	CTCATTTGGG	ATCAGCGATA	180
TTTCCTGATG	TTGCATTGAT	GAATCATAGC	TGTTGCCCCA	ATGTCATTGT	GACCTACAAA	240
GGGACCCCTG	CAGAAGTCAG	AGCTGTACAG	GAAATCAAGC	CGGGAGAGGA	GGTTTTTACC	300
AGCTATATTG	ATCTCCTGTA	CCCAACGGAA	GATAGAAATG	ACCGTTAAG	AGATTCTTAT	360
TTCTTTACCT	GTGAGTGCCA	GGAGTGTACC	ACCAAGGACA	AGGATAAGGC	CAAGGTGGAA	420
ATCCGGAAGC	TCAGCGATCC	CCGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

```
GAATTCGGCC TTCATGGCCT ATAGTGTCTT CCTNGGCGCT GCGACAGCCA ATGTAATGGC      60
CTTTCTGTTT CTCATAAGCA GTTTTGTACA GATAATCACT GGCAATATCC CTGGAAGCCT      120
TGGCATGCTG GATCCCAATG GCATCAAACCT CGAG                                  154
```

(2) INFORMATION FOR SEQ ID NO:977:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 485 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```
GAATTCGGCC TTCATGGCCT AGAAGAAATC TCTCTTCCAT TCCTGAAAAC AATTTTAGTC      60
CATTCCTCTT CATTAAACCTA AGTATAAAAC TACTAATATC TTTCAAGTGC CAGAAGTTCC      120
TCAAGAAGCC GCAGAAAAAG AAATTCCTCGT GGCTCCACCC AAAAAACCAG AAGCTCCGAT      180
TGTCCAGGT ACACTTTAGC CCTGACTTCA TTCTGCAGAA GAGATATCTC CTCTCCTACT      240
GTAAACAATT TTAGCCCAT TCTCTTCATT AACTTAAGTC TAAACTACT AATATCTTTC      300
AAGTGCCTGA AGCTCAAGAA GTTGTCCAG AAAAGAAAGT TCCTAAGGCT CCTCCCACAA      360
AACCAGAAGC CCCACCTGCC ACAGGTATTT TTTACCCCTG TCCTTTTTCT GCAGAAGAA      420
TATCTCTTCT GATCTTAGAA ATATTTTACT CCATTTGTCT CATTAAACCTA AGTGAAAAAC      480
TCGAG                                  485
```

(2) INFORMATION FOR SEQ ID NO:978:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 322 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```
GAATTCGGCC TTCATGGCCT AGAAAGATTC CTACGTGGGC GACGAGGCTC AGAGCAAGAG      60
AGGTATCCTG ACCCTGAAGT ACCCTATCGA GCACGGCATC ATCACCACCT GGGATGACAT      120
GGAGAAGATC TGGCACCACA CCTTCTACAA CGAGCTTCGC GTGGCTCCCC AGGAGCACCC      180
CACCCTGCTC ACCGAGGCC CCCTCAATCC CAAGGCCAAC CGCGAGAAGA TGACCCACCA      240
ATCACCTAGG CCATGAAGGC CGAATTCGGC CTTATGGCC TAGCGCGACC GGCGAGGGAG      300
GAAGAAGCGC GAAAAGCTCG AG                                  322
```

(2) INFORMATION FOR SEQ ID NO:979:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 499 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

GAATTCGGCC	TTCATGGCCT	AGCCGCATCT	TCTTTTGGCT	CGCCAGCCGA	GCCACATCGC	60
TCAGACACCA	TGGGAAGGT	GAAGTCGGA	GTCAACGGAT	TTGGTCGTAT	TGGGCGCCTG	120
GTCACCAGGG	CTGCTTTTAA	CTCTGGTAAA	GTGGATATTG	TTGCCATCAA	TGACCCCTTC	180
ATTGACCTCA	ACTACATGGT	TTACATGTTC	CAATATGATT	CCACCCATGG	CAAATTCCAT	240
GGCACCCTCA	AGGCTGAGAA	CGGGAAGCTT	GTCAATCAATG	GAAATCCCAT	CACCATCTTC	300
CAGGAGCGAG	ATCCCTCCAA	AATCAAGTGG	GGCGATGCTG	GCGCTGAGTA	CGTCGTGGAG	360
TCCACTGGCG	TCTTACCAC	CATGGAGAAG	GCTGGGGCTC	ATTTGCAGGG	GGGAGCCAAA	420
AGGGTCATCA	TCTTGCCCC	CTCTGCTGAT	GCCCCCATGT	TCGTCATGGG	TGTGAACCAT	480
GAGAAGTATG	ACAACAGCG					499

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 333 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	ACTTGCCTCC	60
TTTGCTGTTT	TAGGAACAAT	TCCATGGGAG	GGTCTATTCT	GGATTAGGAA	TTCTTTCTTG	120
AGTAATTTTT	ATTACCTTTT	AATTGTGTCC	ATTTCTTTGG	GAAATAGCAA	GCTCTCCCTG	180
CTCCCGCCAA	TCTCTCCTCT	TACTTTTGG	ACCAGTTCTT	GTACCTCTTA	GCTCACCTCA	240
TTCACTGAAA	ATTGACAAAA	GAGACGTGAG	TTTCTGTACC	TGTGAGACAG	CTTATTTTTG	300
TGTCTTTATG	GTTTCTAAGC	CAAAAATCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 91 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGCC	TTCATGGCCT	ATCGAGTAAT	CCTGATGTTT	TCACCTTCTC	TAATCACTTC	60
TTCTTATTTT	TGTCCAGTGG	CTTTTCTCGA	G			91

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 351 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

GGCCGCTCGT	GGCTGCGTTC	CCGCTGATGC	TTGTGCCTGC	AGAGCCTCTC	CAGGCTGCTG	60
GTGGGGGAGC	ACTCCCTTCC	CCGAGGTCTG	GACGCTGATC	TCCTTTTCTT	CTTCTTCCTA	120
CTCTCATAGT	GCTCATAGGA	AGAGCTGCCA	GGGCTCCCCG	ACCGCGACCG	GGACGTCCTC	180
CGGCTGTGGC	CCCAGGGGCC	CCGCTGTGTC	TCCCTGCTCT	TGTCCTTGGC	TTTCTTCCTC	240
TTAGCTCGCT	CTCGGCTGCT	GGAGCGGTCA	CTGGAGGACC	GCCGGCTCTT	GGCCTTGGAC	300
CGCTGCCTCC	TGGGGCGCTC	CTACCCACT	GATGGTGACG	CCGACCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GAATTCGGCC	TTCATGGCCT	ACACAAATAT	TGCTGTTCCA	TGTTCTCCAC	TTTCATTTTC	60
CACTACAAAT	GAAAAGCAAT	TTTTGAGACT	GAATCTGTTG	CTATTTTAAA	GGTTATTGTG	120
GGAAACTGAG	CTAAAGGAGT	TAGCATCTTT	ATTTTGTAT	CAAAAATAAA	GGTTATTTTG	180
AAATTATTAG	GATTTTTACA	CAATTCTGAA	ATCTGTTGCT	TTGTAAACA	AATTGTTTGA	240
TCTTAGTGAT	CCCCCTACTA	CTACCACCAA	TCACTTCAC	AAAGTCAGTT	ATGAGTCTAC	300
CAGACTTTGT	TCTGAAAAAT	AGAAACAAAA	CACCTGATTA	AGCTCTTGAG	TATGGCATAG	360
GAATTTTTTA	GAAGAATGCA	TTCAAGGATT	CTTTTCCTTT	CCTTCAGTGT	CATTAATGTT	420
AAAAGAGCAG	CCACTGTTTT	GTTGAAACAA	ACAGCTTAAC	TCAGAAATA	AGAACTAGCA	480
CACTCGAG						488

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC	TTCATGGCCT	ACCTCCTGGC	TCAGCAGGCT	CCCTCCTTTT	ACCAAGACTG	60
CTGGGACGTT	GAATCCCGT	GTCTGATCAT	CTCACCTACT	CTCCTCCTAA	CTCCCAACTG	120
AAATCCATCT	CCTCTCTTCC	TCCCCAACAT	CCATCTCTTT	CCCAACATGC	CTTTGCACCT	180
AGAGCAGGTG	AAGAAAGCCC	ATGACTAAAA	CTAAAGACTC	AGAATGAAAC	AAAAGGTGTG	240
ACAAGTTATT	TGTGGGGAAG	GTTTTCAGAT	ATGTTCCAAG	AGAAAATAAG	GTAAACAAC	300
CTTGTTTCATC	AGACCAACAG	TGCTGGAAAG	GGCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	TTCATGGCCT	ACCTGAATTG	GGTGGCGAGT	TCCCTGTGCA	GGACCTGAAG	60
ACTGGTGAGG	GTGGNTTGCT	GACAGTGACC	CTGGAAGGGA	TCAACCTCAA	ATTCATGCAC	120
AATCAGTGTT	ACCTTTTATC	TCTCAGTGGA	CATTCCCTTAA	GCTAATTCCT	TTCTGAGGCC	180
AGCGCATCAT	CCCAGGAGCG	GAAGGTTTTT	ATAGAGCTGA	ATCACATTAA	AAAGTGCAAT	240
ACAGTTCGAG	GCGTCTTTNG	TCCTGGAGGA	ATTTGGTAAT	TACACTATTT	TGCTCTTAGG	300
TCTGGACTCA	CATGGCAGTA	ACTCAAACCT	CGGAGCTCCA	GAGGAGGGTC	TAGGGGCAGG	360
GAGAAGAAGA	ACCTCTGTAG	AGAAGTCTGG	AGGAGCAGGA	GTGACAAGGA	AGAAAAGGGA	420
CCCCTGAGAT	GAGAGCCGGG	ATGTGGAAGG	GAAAGATAGA	TAATGGATCG	CAGAAGAGCA	480
AATGGGGCCT	CNGGTGGTAC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTCGGCC	TTCATGGCCT	ACACCTTCAC	ACCTGTCCTT	ACCTCCATTC	TCACTTCCAC	60
TGTCTTCACT	AACCTCACCA	TCATCACTTC	AATCTTCCCT	TCCATTCTCA	CTCTCTTCTC	120
ACTCACTGTC	CCTCTTTCAC	CTCCATCCTC	ATCTCTGTCC	TCCCGTCTAT	TCTCCTCTCC	180
AACCTCACTT	CTGTCTCTCC	CTTCTCTCTG	CTCTCCATCC	TCACCTCCAT	CCTCACCTTC	240
AACCTCACCT	TTATCCTCAC	CTTCAACCTC	ACCTTTATCC	TCACCACTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

CTCGAGTATC	CACTTGCCCTC	GGCCTCCCAA	GGTGCTGGGA	TTACAAGCAT	GAGCCACCAT	60
GCACGGCTGT	AGATGTAAAT	TTTGGAAGA	GGAAGGCATC	AAATTAGGGG	TGGGGGGATG	120
GAGGTACATC	CAGCTTAGCC	TTCAGACCTT	AATGGAAATG	CTTTCTAAAC	TAGCGATCCC	180
AGAGCAGTTG	ACTCTCCTGA	AATAAAACAG	GATCTGAGTA	GGCCATGAAG	GCCGAATTC	239

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GGCAGACTGC AATACCTGCG TGGAAATAGA AGACAGAAAG GTTCAAGAC AACAGATGAA      60
TTGTGAAAGA GAGCAGCTAA GGGGTAATCA GGAAGCAGCC GCTGCCCTG ACACAATGGC      120
TCAGCCTTAC GCTTCGGCCC AGTTTGCTCC CCCGCAGAAC GGTATCCCCG CGGAATACAC      180
GGCCCTCAT  CCCACCCCG  CGCCAGAGTA CACAGGCCAG ACCACGGTTC CCGAGCACAC      240
ATTAAACCTG TACCCTCCCG CCCAGACGCA CTCCGAGCAG AGCCCGGCGG ACACGAGCGC      300
TCAGACCGTC TCTGGCACCG CCACACAGAC AGATGACGCA GCACCGACGG ATGGCCAGCC      360
CCAGACACAA CCTTCTGAAA ACACGGGGCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC TTCATGGCCT ACTTCCGGGC TTTGACTCAA TTCATGGGAA ACAGGAAAAG      60
CAAAACTAGT TGATCTTGCT ACTAAGCGCG ACTGAAGTTT CTTGTCTTCA TTGCTAAACA      120
ACTTCCAAAT CACTTTGACT CTTTGACCAT ATTCATGTCT ATTTCCCAT AAAGCATCAC      180
AAAATAATGA AGGAATCTT AGGAAGAGCC TCAAGATGCC CATGTGGCGT CTGTGTGGGC      240
TGCCTCGTCT GGTAGTTCAG GGACCCACTG GGCCATTGA AGGGCAAAGA GAAAGCCCCA      300
GGTCTCATGG CAGGAGACAA GACTTCCACA GTGGTGAGCC AGTAAGGAAC AGGGCACGTA      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC TTCATGGCCT ACATGTTCAT TATGAAGTTA TTAGTAATAC TTTTGTTTTC      60
TGGACTTATA ACTGGTTTGA GAAGTGACTC TTCCTCTAGT TTGCCACCTA AGTTACTACT      120
AGTATCCTTT GATGGCTTCA GAGCTGATTA TCTGAAGAAC TATGAATTC CTCATCTCCA      180
GAATTTTATC AAAGAAGGTG TTTTGGTAGA GCATGTTAAA AATGTTTTTA TCACAAAAC      240
ATTTCCAAAC CACTACAGTA TTGTGACAGG CTTGTATGAA GAAAGCCATG GCATTGTGGC      300
TAATTCATG TATGATGCAG TCACAAAGAA ACACTTTCT GACTCTAATG ACAAGGAGCT      360
CGAG

```

(2) INFORMATION FOR SEQ ID NO:991:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

GAATTCGGCC	TTCATGGCGG	GGAAGAAGAC	AAGAAAATTA	ATGAAGAACT	GGAGTCTCAA	60
TATCAGCAAA	GTATGGACAG	TAAATTATCA	GGAAGATATC	GGCGACATTG	TGGAATTGGC	120
TTCAGTGAGG	TAGAATACCA	TGATGGAGAA	GGTGATGTGG	CTGGAGATGA	TGATGATGAC	180
GATGATGATT	CACCTGATCC	TGAAAGTCCA	GATGATTCTG	AAAGCGATTG	AGAGTCAGAG	240
AAAGAAGAAT	CTGCTGAAGA	ACTCCAAGCT	GCTGAGCACC	CTGATGAAGT	GGAGGTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:992:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

GAATTCGGCC	TTCATGGCCT	AGGTGCAGCA	GGTCCTCTGG	GAAGTGTCGC	ACAAAGGAGT	60
CGCCCACTGG	AAGGTTCTGG	GCAGGCGAGA	TGCCCAGAGG	TGATCCCTGC	CCGCCCCCTCC	120
CACCTCCCTT	CCCACACAGC	CCATGGAGGT	GTTTGTGGAC	GACGAGACCA	AGCTCAGCGT	180
GCACGGCCTG	CAGCAGTACT	ACGTCAAAC	CAAAGACAGT	GAGAAGAACC	GCAAGCTCTT	240
TGATCTCTTG	GATGTGCTGG	AGTTTAACCA	GGTGATAATC	TTCGTCAAGT	CAGTGCAGCG	300
CTGCATGGCC	CTGGCCAGC	TCCTCGTGGA	GCAGAACTTC	CCGGCCATCG	CCATCCACCG	360
GGGCATGGCC	CAGGAGGAGC	GGTGAGTNCG	AACCGCCCGC	CAAGGCTGCA	GGGNGCACCA	420
CCAGGAGCCC	AGTGTCTGAC	GGCCTCCACT	TGTTTCTCCT	GCACCCCNNC	CCATCAGCGT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

GAATTCGGCC	TTCATGGCCT	AAAGGAATTT	ATCTATTTAA	TCATTGAATG	TATTGAACAT	60
TCATTTGTTT	ATAATTTTGT	TTTGTTATTG	AAAATGTCTG	TAAGATTTAT	AGTGATGTTC	120
CCTTTTCTAT	TCCTGACATT	GTTAATTTGT	GTCTCTCTC	CCTCCATCCC	TCTCTCACAT	180
CTCGAG						186

(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC	TTCATGGCCT	AGTGTTTTCA	TAAAGGGGTT	GAGGCCACCA	GTACTGCAGC	60
GAATTCCTT	TTCTTCTCCC	TCCTCCTTCC	TTCTCTGAGC	TTGCTTTTAG	GGAAGGTTAA	120
TCTTACAGGC	TACCTATGTT	TCTCTCCACC	TTACTAAAAT	CTAAATAATG	ATAGAAATTT	180
TAAGTTTTTA	AATTGAGTAG	TTCTGAGTAA	TCCTAGAATA	TTTTTCCAAA	TTAAATAATC	240
CTTTATTATT	TGCAAGTTGG	GCCAAATTTT	TTTTTTTTTG	GAGACGGACT	CTTAACAATC	300
TAAGATTGTT	TCAACAGGAC	TTTCTTATTC	CCATCCCCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

ATCTTTAACA	GAATTATTAT	TATTTAATAT	AGAAGCACAA	GCAGGGGAAA	AATACGTCAT	60
CAAAATTTTC	AAGTAGTCAA	CTCATTATTG	GAGCCATTTT	ATTTTATAAT	TTTATTTATC	120
AGCTGGTTCA	GAATTCAAAA	GGGCATGTAA	TGAAGTCGCT	ATCCTGCTTC	TGTTTCCCAG	180
CTATCCAGCT	TCCCTCCCTG	GAGGCAAACA	GTGTCATTGG	TTTTCAATAT	ATCCTTCCAG	240
ATGTATGTTA	TCCGTAATC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GATTCGGCTT	CATGGCCTAC	AGCAGACACC	CTCCTGCCCA	CACCTACTTG	TCCGCGCGGT	60
CTGAGGTTTG	CTTCGAG					77

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCT	TCATGTCGCT	CTTCCTGCAG	GTCAACATGT	ACAGCAGCGT	CTTCTTCCTC	60
ACCTGGATGA	GCTTCGACCG	CTACATCGCC	CTGGCCAGGG	CCATGCGCTG	CAGCCTGTTC	120
CGCACCAAGC	ACCACGCCCC	GCTGAGCTGT	GGCCTCATCT	GGATGGCATC	CGTGTACAGC	180
ACGCTGGTGC	CCTTCACCGC	CGTGACCTG	CAGCACACCG	ACGAGGCCTG	CTTCTGTTTC	240
GCGGATGTCC	GGGAGGTGCA	GTGGCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:998:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCTAGA	CCTGCCCCCA	GGCCACAGTC	ACACCCCCCA	GGAAGGAAGA	GAGAATGGAT	60
TCTGCAAGAC	CATGTCTACA	CAGACAACAC	CATCTTCTGA	ATGACAGAGG	ATCAGAAGAG	120
CCACCTGGCA	GCAAAGGTTT	TGTCACTCTA	AGTGATCTTC	CAGGGTTTTT	AGGTGATCTG	180
GCCTCTGAAG	AAGATAGTAT	TGAAAAAGAT	AAAGAAGAAG	CTGCAATATC	TAGAGAACTT	240
TCTGAGATCA	CTCACAAACT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:999:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCT	TCATGGCCTA	GGCGATTGTA	ACTGCCTATG	AGAATAGCTC	TCAGCATGAT	60
CCCAGTTCAA	ATAACGCTAT	GCTTGGGGTT	CATGCATCAG	CTTCAGCGAT	CATCCAGTAT	120
GGAAAAATCG	CCCGGAAACA	AGGACTGGTC	AATGTAGCTC	TGGATATATT	AAGTCGGATT	180
CATACTATTC	CAACTGTTCC	TATCGTGGAT	TGCTTCCAGA	AGATTGACA	GCGTACTCGA	240
G						241

(2) INFORMATION FOR SEQ ID NO:1000:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 295 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC	TTCATGGCCT	AGAATTGAAT	TTAGACTTTA	CAGAGTTACT	GGTTTGTA	60
TCTTTGAGTT	GTTTAAATTT	TAATGTTAGA	GTTTACTGT	TTGATCAGCA	CATTTTTTTT	120
CTCTTTTGTC	TATAGGCCCG	AAATGTTTGA	GACGGCGATT	AAGGAGAGCA	CCTCCTCTAA	180
GAGCCCTCCC	AGAAAAATAA	ATTCATCACC	CAATGTTAAT	ACTACTGCAT	CAGGTGTTGA	240
AGACCTTAAC	ATCATTGAGG	TGACAATTCC	AGATGATGAT	AATGAAACAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:1001:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 248 base pairs
 - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

```
GAATTCGGCC TTCATGGCCT AGATATTTAG AAATTTTGTG TATTATATGG AAAAAGAAAA    60
AAAGCTTAAG TCTGTAGTCT TTATGATCCT AAAAGGGAAA ATGCCTTGG TAACCTTCAG    120
ATTCCTGTGG AATTGTGAAT TCATACTAAG CTTTCTGTGC AGTCTACCA TTTGCATCAC    180
TGAGGATGAA ACTGACTTTT GTCTTTTGA GAAAAAAAC TGTACTGCTT GTTCAAGAGG    240
AGCTCGAG                                         248
```

(2) INFORMATION FOR SEQ ID NO:1002:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```
GAATTCGGCC TTCATGGAGT CAGCCTTCCA GTCCTCATCT CAGAAATTGA CTAGCCAGAA    60
GGAACAGAAA AACTTAGAGT CTTCAACAGG CTTTCAGATT CCATCTCAGG AGTTAGCTAG    120
CCAGATAGAT CCTCAGAAAG ACATAGAGCC TAGAACAACG TATCAGATTG AGAACTTTGC    180
ACAAGCGTTT GGTTCTCAGT TTAAGTCGGG CAGCAGGGTG CCAATGACCT TTATCACTAA    240
CTCTAATGGA GAAGTGGACC ATAGAGTAAG GACTTCAGTG TCAGATTCT CAGGGTATAC    300
AAATATGATG TCTGATGTAA GTGAGCTCGA G                                         331
```

(2) INFORMATION FOR SEQ ID NO:1003:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 248 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```
GAATTCGGCC TTCATGGCCT ACAGTATTGG ACTTTCAGAA GCTGAACAGA TGATGGGTGA    60
GCAAACTGGT TTAGCAGACC CAAGAGAGCT GAATCCTAAG CCAGCAAATA GAGAAATCCA    120
AGATTCAGCC CAAATTATGC TTAGAATTTC CTCAAAGGCT CAGAAACTGG CTGCACTAGT    180
TCCCCCGACA GGAAGCATGG ATTGAGGAGG TACCAAACCC ACTCCCCACC AAAAACCCAA    240
AACTCGAG                                         248
```

(2) INFORMATION FOR SEQ ID NO:1004:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 281 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GAATTCGGCC TTCATGNCCT GGNGAAGAGN AACAAGAGAA CAAAAAAAAAN ANAAGTCGAG      60
AGTCAGTAAT TTTCTTACTT AATATTGNGG GGATNTTACT TNATACATAA AGTTANTGAA      120
ACTAGAAATA GTGGTTTAAT ATATTACTTN TAATTCAAAA ATTAACCTAT ATTTACAGAT      180
GCTCTACACA GTTCTTTTGT GAATCCACCT ATGGTTTAT TTTNATTAAT TTTTNTTNC      240
ANAGCNATGA AATGTTGCTT TGTGGNGCCA GCGCACTCGA G      281

```

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACATAAACCA TCACATTTAA TCTGGCAGCT GCCCTGTTTT      60
TGAGGTTTTT TTTGTATTTA TCTTCTTTG GTAAATGAAA GCTCTCATCT TTGTTTACAG      120
GCCAGAAAAA CTGAAAAAGA CACAGGCTCT TCCACTTACT GGATGTTTGA CAAAATGATA      180
TTTTGGGGCC AAAACATTGG CATTACTGGT AAACCTGGTA GAGATTCAGT AACTCAGACT      240
TTATTCAGTA TCTCCTGAAA AAATAATCTG CATTACATG ATGACTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

GAATTCGGCC TTCATGGCCT AAATTTTCAC ATATATGTAT ACTTAATTTT CAGCAATTAT      60
GACACAATAA AAAGAATATG CAAATTTATT GTTGTTCAG AAGGTTTTC AGGACTGGGA      120
ACGCTTTAGT GTCATCAACA GTAAACCTCA GATACTGTTT TGCACAGTTC AGAAGTACCA      180
TACCAGGTAT TGTGAGTGGC AAGAACGCCA GGGGACAGAG ATGCTTCTGG TAGATGAGGG      240
CCAGAGAAAC CAGCTCTCCT CCATTTTGAC AGCAATTTCT CACTGTGGCC ATTTGGCCTC      300
CATTATGTTT TGAGAGGAAC GCTCGAG      327

```

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA ATAGTGTTTT ATGCCACAGA GAATCAAGTT      60

```

GCATTGTGTA TACTAAATGG TCAAGCATTT TCAAGAACAT GACAAAATAA AAACATACAA	120
ATTTATATCT CAAAAGGAAA GTATCTTCTT TCATGTCAGA TCATCAGCAC AGAAGCCCTC	180
GATGCATGCA AAGGCAAGCA CAGGCTCTGC AGATGAGATG TGAAGAAGCA ATTAGGGAAA	240
TTCTCGAG	248

(2) INFORMATION FOR SEQ ID NO:1008:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 460 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GAATTCGGCC TTCATGCCTA CATCAAACCC TTTTCTTGTA GCAGCACAGG ATTCTGAGAC	60
AGATTATGTC ACAACAGATA ATTTAACAAA GGTGACTGAG GAAGTCGTGG CAAACATGCC	120
TGAAGGCCTG ACTCCAGATT TAGTACAGGA AGCATGTGAA AGTGAATTGA ATGAAGTTAC	180
TGGTACAAAG ATTGCTTATG AAACAAAAAT GGACTTGGTT CAAACATCAG AAGTTATGCA	240
AGAGTCACTC TATCCTGCAG CACAGCTTTG CCCATCATTT GAAGAGTCAG AAGCTACTCC	300
TTCACCAGTT TTGCCTGACA TTGTTATGGA AGCACCATTG AATTCTGCAG TTCCTAGTGC	360
TGGTGCTTCC GTGATACAGC CCAGCTCATC ACCATTAGAA GCTTCTTCAG TTAATTATGA	420
AAGCATAAAA CATGAGCCTG AAAACCCCCC AGAACTCGAG	460

(2) INFORMATION FOR SEQ ID NO:1009:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GAATTCGGCC TTCATGGCCT ACGACAAGTT TTTAAATTTA CTCTTGAGTA TGGTTCCAGT	60
GATTTACCAG AAAAACCAAG AAGACAGGCA CAAAAAGCA AACGGCATTT GGCAAGATGG	120
ATTATCAACT GCAGTACAGA CTTTATAGTAA TAGATCTGAG CAACACATGG AGTATCACAG	180
TTTCTCAGAG CAGTCTTTTC ATGCCAATAA TGGGCACGCA TCATCAAGCT GCAAACCTCGA	240
G	241

(2) INFORMATION FOR SEQ ID NO:1010:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GCGATTGAAT TCGACCACTT TGTTCAAATT TGTTATTATT TTTCTACTTT TGTATTGATT	60
CTGTTAATTCT TTATCTATTG GTTCAGCTTA CTTTTTTATG TTGGTCACAT TTCTCTTCAT	120
TGATTGTGTT AATTTTCTA TGTTGATAGA CACATTTTAT GTTCATCACT TTTTCTCTC	180

CTCCTTCAAT TATTATCCTT CTGATTTCTT TTTGTTTTCT CATAGTGTG GCCATCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:1011:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GAATTCGGCC TTCATGGCCT AGGCCACAAC TCAAAAGCAT TATCTTTTTT AGGGTTAGTA 60
 GAAATTGTTT TATGTTGAT OGAGGTTTGT TTGATTGTCA AAATGTACAG CCACAGCCTT 120
 TTAATTGGG AGCCCCTGTT GTCATTCAA TGTGTACCTC TACAGTTGTA AAAAGTATTA 180
 GATTCTACTA TCTGTGGGTT GTGCTTGCCA GACAGGTCTT AAATTGTATA TTTTGGAA 240
 AAGTTTATAT ACTCTCTTAG GAATCATTGT GAAAAGATCA AGAAATCAGG ATGGCCATTT 300
 ATTTAATATC CATTCAATTC ATGTTAGCGG AACTCGAG 338

(2) INFORMATION FOR SEQ ID NO:1012:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 97 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

TGAATTCTAG ACCTGCCTCG AGCTCCAGCT GCCAACACCC TTGGACACAA TATTCCAGTC 60
 TCCACTGCCC ATCTCATGTG GTTGCAGGNT CCTCGAG 97

(2) INFORMATION FOR SEQ ID NO:1013:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC TTCATGGCCT ACACATTCTG GGGGAAAAAA ACTGGAATTG TTTGTATTTT 60
 GTTTTTTTGG GGGGGGATCT TTATGTGAAA AATCAGAGCT ACTTGTTACC ATAAGCCCTT 120
 ACTATCAACA AGATAATTAT TGTAATCAC TTTTATCC CAGGTGGAA TTGCTTTCCC 180
 CTTCTAAGTT ATCTTCCCTT AATAATATTT ATGATAACCAG GACAGTGAGG GTATAAGAGC 240
 AAATGTAGTG AGGTATTCAA AAATCCTGCA TATATGGACT CAAAAGTTCT TTAGTTATTT 300
 GAATTATATA TAGCTATATT ATTTATTAG CTTGGGTTGT CAGAAGATTG CCAATTTTAA 360
 GAGTAAAGAG GAGAGAGATA AGTAATAAAA ATAGAGGAGG GGTACTCTCG AG 412

(2) INFORMATION FOR SEQ ID NO:1014:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 218 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTATGTC TCCCATCTGT GCTTTTCCTA AGTGGGGCTC CCGTGCCGTT CACCTCACAT	60
TCCTGGTGTG TTACTTGGCA GGCACCTCCCA CCACTCCGAA AGGGAGGCCC TTCCTGGGAG	120
GGAGGCAAGA AGGCTCCCCA GCCCCTTTGC CCCCTTTCCT GGGCCTGCGT TCCCAGGGCC	180
TCCCCAGCCC CTCTGGCTAC CCCGTGACCT GCCTCGAG	218

(2) INFORMATION FOR SEQ ID NO:1015:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 513 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC TTCATGGCCT ACCTTATTAC CAGACAACT TAACCAAACC ATTTACCCAA	60
ATAAAGTATA GGCGATAGAA ATTGAAACCT GGCGCAATAG ATATAGTACC GCAAGGGAAA	120
GATGAAAAAT TATAACCAAG CATAATATAG CAAGGACTAA CCCCTATACC TTCTGCATAA	180
TGAATTAAC AGAAATAACT TTGCAAGGAG AGCCAAAGCT AAGACCCCG AAACCAGACG	240
AGCTTCGGGG GAAGTATGTA GGAGTTGAAG ATTAGTCCGC CGTAGTCGGT GTACTCGTAG	300
GTTCAGTACC ATTGCTGGCC AATTGATTG ATGGTAAGGG AGGGATCGTT GACCTCGTCT	360
GTTATGTAAA GGATGCGTAG GGATGGGAGG GCGATGAGGA CTAGGATGAT GGCGGGCAGG	420
ATAGTTCAGA CGGTTTCTAT TTCCTGAGCG TCTGAGATGT TAGTATTAGT TAGTTTTGTT	480
GTGAGTGTTA GGAAAAGGGC ATACAGTCTC GAG	513

(2) INFORMATION FOR SEQ ID NO:1016:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 74 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

GAATTCGGCC AAAGAGGCCT ACCAAAATAA AAACAGAAAT TATGAGATTG CCTCAACTCC	60
CACATATGCT CGAG	74

(2) INFORMATION FOR SEQ ID NO:1017:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

```
GAATTCGGCC AAAGAGGCCT AAAGACCTGA GGTCCAGGAT GAGCTCTTTC CCACAGAAAC      60
TTTGACAAAT GTGTGGACAA TAAAGNAGCA CTGCTTCCCT CATTACCAT AGCTCAGCTG      120
GATTTATAGA TTAAATCTT TTAACGAAAA AGTTCATGTT GAGGTATTTA GATACTTTTT      180
AGAGGGTTAA ATACCAAGTT ACAGTGACAT TTAAACCGAG TGTCTAGAAC ATGAAGGCAA      240
AGAGTCTGCT ATTCGGAGGT AAATTTTATC AGTGTTTGA AGGTGAAGCA TTTGTCATG      300
AAATGTTGAA TGAATTTCTG TGACATGGCA CGAGGGTGGT AAGAAAAAGT GGGAAC TCGA      360
G                                                                                   361
```

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

```
GAATTCGGCC AAAGAGCTAC GAGAGTGTC TGAATATCT CCGAGAGTCC TTCAGTGAGA      60
GGTTGTTTTT TTTTCTATG GCTGGTGTC CTTCCTCTGG AGCATCTTCA TCGTTTCATC      120
ACAGTCACTT TCTAACTGGA GTCAGTAAGT TCACCTTCTT TAAGCTTCCC AGGCTGCAGA      180
TACAGAGAGT GTCCACATTC CACAGTCAGC TATTTCTACG ATCACTCCAT TTACGCTTGG      240
TTCAAATTC ACTCCAGTG TTACCACTTC TCATTCTTTT GCTGTGTTTC ATCTGGGCCA      300
TTTGCTTCTT ATGATTACCT GTTTTGTAA ACTGTCATGT GGGTTTATCC CTGGGAGACA      360
AGGAGACAGC ACAACCCCTT GGTTTGCTGT CTGTGAGCGA ACTCGAG                      407
```

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

```
GAATTCGGCC AAAGAGGCCT ACTAAGTTCT GTGAAGTGTA TGTAGCATCT GGGCTATAGA      60
TTTGGAGCTT TTACTGACTC TNGAGAGTGG TGAAGGAGTA TCTGCAGCTC TGATGACAGG      120
NACAGAGAGA GAGAGAGAGA GATGGGTATG CCATCCGTGG ACACCAGGAA GAGTACCGAG      180
GACTGCTGTA GGCTCCTTCA GTTCTAGTTT CCAACTCAAA GCAATTTTAA AGTTTTTGTG      240
TAATTATGNN TCGGCTCTGC TAAGANANNA AGGTACCTTA CATAAGTCCC TCAAAAGACT      300
TGTGTGTTTG AAGATGGCGC CCTCGAG                      327
```

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

```

GAATTCGGCC AAAGAGGCCT ATGAATGCTA TATACCCTTT TTATATCAAA AGTCTCAAGC    60
ACTTATTTT ATTCTATGCA TTGTTTGTCT TTTACATAAA TAAAATGTTT ATTAGATTGA    120
ATAAAGCAAA ATTACTCGAG                                         140

```

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

```

GAATTCGGCC AAAGAGCTAC GGCCAAAGAG GCCTAGACTC GCCGCTGNTC TCACACCAGT    60
GTGGAACGTC CCCGCCNNTC CCCTTGGGTC CTTTATCTTA GGGGACCGGG ACGTCCATCC    120
CTTCTGCACT GGCAGCNTCT GAGCCAAAGC GCCTCTCCCA GAAGCCGGAC TTTCCAGGAC    180
CCTCACTCCC AGCCACACCC TGACACGGCC TGACTGGGGT CTCCTGTGAG TCCCATGCTC    240
GGCTTTGTCT GACACCTCCC AGGACAAGAC CGTCCCTTCT CCCCAACTG GGCTCTCCAC    300
CAAGAGCCGC GTTCACCCAC GGGGGAGTGG GCTCCACACA GGCCAGTCCT CGAG         354

```

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

```

GAAAGAGGCC TAATCGTCAC ATCCATCAGA GGATTGCTGA TCACTCTTAC CAAGTTCTTT    60
TATGCCATCT CTAGCAGTAA GTCCTCCAAT GTCATTGTCC TGCTATTAGC ACAGATAATG    120
GGCATGTACT TTGTCTCCTC TGTGCTGCTG ATCCGAATGA GTATGCCTTT AGAATACCGC    180
ACCATAATCA CTGAAGTCCT TGGAGAAGTG CAGTTCAACT TCTATCACCG TTGGTTTGAT    240
GTGATCTTCC TGGTCAGCGC TCTCTCTAGC ATACTCTTCC TCTATTTGGC TCACAAACAG    300
GCACCAGAGA AGCAAATGGC ACCTTGAAGT TAAGCCTACT ACAGACTGTT AGAGGCCAGT    360
GGTTTCAAAA TTTAGATATA AGAGGGGGGA AAAATGGAAC CAGGGCCTGA CATTTTATAA    420
ACAAACAAAA TGCTATGGTA GCATTTTTC CCTTCATAGC ATACTCCTTC CCCCTCAGGT    480
GATACTATGA CCATGAGTAG CATCAGCCAG AACATGAGAG GGAGAACTAA CTCAAGACAA    540
TACTCAGCAG AGAGCATCCC GTGTGGATAT GAGGCTGGTG TAGAGGCGGA GAGGAGCCAA    600
GAAACTAAAG GTGAAAAATA CACGAACTC GAG                                         633

```

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 665 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC	AAAGAGGCCT	ATCTTGCGAG	TGGAGTGTCC	GCTGTGCCCG	GGCCTGCACC	60
ATGAGCGTCC	CGGCCTTCAT	CGACATCAGT	GAAGAAGATC	AGGCTGCTGA	GCTTCGTGCT	120
TATCTGAAAT	CTAAAGGAGC	TGAGATTCA	GAAGAGAACT	CGGAAGGTGG	ACTTCATGTT	180
GATTTAGCTC	AAATTATTGA	AGCCTGTGAT	GTGTGTCTGA	AGGAGGATGA	TAAAGATGTT	240
GAAAGTGTGA	TGAACAGTGT	GGTATCCCTA	CTCTTGATCC	TGGAACCAGA	CAAGCAAGAA	300
GCTTTGATTG	AAAGCCTATG	TGAAAAGCTG	GTCAAATTTT	GCGAAGGTGA	ACGCCCCGTCT	360
CTGAGACTGC	AGTTGTTAAG	CAACCTTTTC	CCACGGGATG	GATAAGAATA	CTCCTGTAAG	420
ATACACAGTG	TATTGCAGCC	TTATTAAGT	GGCAGCATCT	TGTGGGGCCA	TCCAGTACAT	480
CCCAACTGAG	CTGGATCAAG	TTAGAAAATG	GATTTCTGAC	TGGAATCTCA	CCACTGAAAA	540
AAAGCACACC	CTTTTAAGAC	TACTTTATGA	GGCACTGTG	GATTGTAAGA	AGAGTGATGC	600
TGCTTCAAAA	GTCATGGTGG	AATTGCTCGG	AAGTTACACA	GAGGACAATG	CTTCCCAGGC	660
TCGAG						665

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC	AAAGAGGCCT	ACTTGATTG	GATTCACATT	GCTTTCATT	CTTAAAATGC	60
TTCACCTCAG	GTTCTTGTC	TTGGAAATA	ATTTCAAGGT	GCATTGTATC	CATTTTAAGC	120
TGCTTTATTT	TATTTTCACT	TGTATGAGCA	AATTCCTGGG	GGAGCTTTGC	TTTTCTTCTG	180
CCAGAAAAAC	AAAAGGGGGA	AATGAAAATC	TTTTTTGGAA	TGAGTTCTGT	GGGTTTTCTT	240
AACAGCCACC	ATGTTTATTA	GTTACATTGT	GTTTTGGCCA	ATCAGTGCAA	TGTAACAAAT	300
TTTACAGTTA	ATTGCTTTCA	ATTGAGTCAG	TAAACCTGTG	ATAGATAAAT	TATTTAACTG	360
GAAAACCTAG	GTACCCATAA	GAAAAAAGAT	TCATTCTCTG	TGAAAACCTGT	AGGAATCTGT	420
TGTTGTTTTC	ATTTGAATAT	GCTCTACTTC	TGCTCTAGTA	TTTGGTTTGG	AATATATTTT	480
GTGGCTCTAA	TTACTGTATT	TTTAAAAACC	CTACCTCCAT	TAACAGTTGG	TAAAGGCCCC	540
CTTCTCGAG						549

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 92 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

GAATTCGGCC	AAAGAGGCCT	AGTTAAGTCT	GAAGTAGTCT	TTTCCTTTGT	GATGTGGTTG	60
GAAAGTCTTC	CCTGTTCCAA	GGACTCCTCG	AG			92

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

GAATTCGGCC	AAAGAGGCCT	AGTAAAAAC	TAATATTTAT	ATGACAGAAG	AAAAAGATGT	60
CATTCGGTAA	AGTAAACATC	ATCATCTTGG	TCCTGGCTGT	TGCTCTCTTC	TTACTGGTTT	120
TGCACCATAA	CTTCCTCAGC	TTGAGCAGTT	TGTTAAGGAA	TGAGGTTACA	GATTCAGGAA	180
TTGTAGGGCC	TCAACCTATA	GACTTTGTCC	CAAATGCTCT	CCGACATGCA	GTAGATGGGA	240
GACAAGAGGA	GATTCCTGTG	GTCAATCGTG	CATCTGAAGA	CAGGCTTGGG	GGGGCCATTG	300
CAGCTATAAA	CAGCATTGAG	CACAACACTC	GCTCCAATGT	GATTTTCTAC	ATTGTTACTC	360
TCAACAATAC	AGCAGATCTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 403 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

GAATTCGGCC	AAAGAGGCCT	ACATGTGGAC	TGCACTGTTT	ACTTTTGGTT	GGACTGGGAC	60
AATTTGGGGA	ATATCTACTA	TGTTTATTCT	TCAAGAACCC	ATCATCCCAT	TAGATGGAGA	120
AACCTGGAGT	TATCTCATTG	CTATATGTGT	CTGTTCTACT	GCAGCATTCT	TAGGAGTTTA	180
TTATGCCTTG	GACAAATTCC	ATCCAGCTTT	GGTTAGCACA	GTACAACATT	TGGAGATTGT	240
GGTAGCTATG	GTCTGCAGC	TTCTCGTGCT	GCACATATTT	CCTAGCATCT	ATGATGTTTT	300
TGGAGGGGTA	ATCATTATGA	TTAGTGTTTT	TGTCCTTGCT	GGCTATAAAC	TTTACTGGAG	360
GAATTTAAGA	AGGCAGGACT	ACCAGGAAAT	ACTACGACTC	GAG		403

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 71 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

GAATTCGGCC	AAAGAGGCCT	AAAACCGAAA	CTTCGATGAA	AATGAAATTC	CTCAAGAGAA	60
TGGCACTCGA	G					71

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 349 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GAATTCGGCC AAAGAGGCCT AGAAACATGT CTAAGGTNGC ACACAGCTAG TANGCGTTAG	60
AAACGTGTCT CAAACCCAAG AGGTCTGGCT CTGGCATCCG TGATCATAAC CACTNGCTTT	120
GCCTGATCTA ACAGTAAAGA TGGATGAAAA AATAAATCAA GTGTGATGAG TGTATATAA	180
GAAAGGGGAA ATAGCAGGGT TCAGTGTGGA ACATAGGAGA GTGGGCCTTC ATTCCCTCCA	240
GTTGAGGGCC AAATAAGGCA TCCCTGAGGA AGAGACATTA AGCTGAGATC TGAAAGGTGA	300
GCCTGAATAA GTTAGGTGAA GGAGCATGAG TAAAGGGAAG CCGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC AAAGAGGCCT ACTGATGATA ATAAACAGA GCTTTACTTG GGAGAAATTA	60
GCCTTGAAGG TGTGACATCC AAAACAATTT TTTAAAAAA ATTTAGACAA CTAAAAAGGG	120
AAATGTCAA AGGGAGAAAC TTAATAAACA AAAGGAAAGT AGTCAGAGAA TCAGAGAGAA	180
AATATGAACA GAACACAGTA AAAAGGAATG GCTACAAGAG GGATCAGCAA CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

GAATTCGGCC AAAGAGGCCT ATTAGAAATA AATATCTTCC TTCAATAGAT GAAAATGAAA	60
ATACAGAAAA AAGAGAGCAG TTGTCAAATT TAAAGTTTT GAATCACTCC CCAATGTCTG	120
ATGCCTCTGT CAATTTNGAC TACAAATCTC CATCCCCATT TGAATGCAGC ACTGATCAAG	180
AAGAGAAAAT TGAAGATGTT GCTAGTCACT GTCTGCCTCA GAAGGACCTG TATACTGCTG	240
AAGAGGAAGC TGCTACCCTT TTTCCTAGGA AAATGACATC CCATAATGGG ATGGAGGACA	300
GTGGAGGAGG AGTACTGGA GTGAAGAAGA AACGGAAGAA AAAGGAGCCA GGAGACCAAG	360
AGGGTGAGC AAAGGGAAGC AAGGACAGAG AGCCCAAGCC AAAGAGGAAA CGAGAACCGA	420
AAGAGCCAAA GGAAGAGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

GAATTCGGCC	AAAGAGGCCT	AATAAAGAGC	AAAAAATGT	TAATGTCAAG	TCAAATTGCC	60
TGTAAATGAC	TTAAGGAATA	TGTTAATGAT	CTTGCTCAA	ATGAATAATT	ATAAAGCAGG	120
TGCACTGGAG	ATATGATCAT	TTAACTGAAA	GAAAACAGCT	TCTAATGGCT	TCAATAACCA	180
AGATAATGGT	GATATTGGAG	AAGCCTGTTA	AACTCATTGT	TCATGCCATT	CATTTAATAC	240
ACAAGAGAAC	TTCAGATGGA	ATCTCCCTGT	GGACTCATTG	CCCTGCTTAT	TTAAATAGCA	300
GTTAATTTAA	ACACACACCC	AAGTCAAAAC	TGCATTATTT	CTAACACACC	TCTTCTAAT	360
AAACTATGTT	CTCCAATAAC	AGAACCCTG	TCTCGAG			397

(2) INFORMATION FOR SEQ ID NO:1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC	AAAGNGGCCT	ATTTTAAAAA	TCACTTTAAG	NATCCAATAG	AGAACAACAA	60
AGCCATATTG	AGATGCAGGT	TTTAGGAATT	TGGTAGTAAT	CCCTCACAAG	GTCAGACTTG	120
ATCTCCTGGA	CAATCAGGGC	ATGCTAGTCA	GCTTTCATGA	CTCAGCAAAG	CTACAAATTA	180
TGTATTTTGG	CTTTTGTGG	AAATTGCCAA	CCCTACAGAT	AGCAAACGTC	TCCTCGGTTG	240
TCAAAAAGTA	AGAGTAGTTT	TTAGAATTCT	GCCTTTGGGT	CTTGTTAGAA	GAAATATTTA	300
CAAGATTTGC	TATTTGTAA	CATTTTAGCT	CCTTCCTTGT	TCCTTCAGTC	TTGCTGCTGT	360
GCACACCACC	AG					372

(2) INFORMATION FOR SEQ ID NO:1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGCC	AAAGAGGCCT	AAATATGTTT	TTTCTGCTT	TTATACTGT	AAAATGGAAT	60
GTTCTTCTTA	CCTTTAACCT	TATGATTGAG	CTGTCCATAT	CAGGTTTTTT	TTTCTACTGA	120
CTATTTATTG	GGACTAGCTC	ACTTTATTAA	TTATGCATCC	TGATATCTTA	TAGAATGGAT	180
AGTGTATTTC	AATATTATTA	ATTAAGTGGG	CCTTTGTTAG	ATATAAGCA	AGATACCTCC	240
AGTAGGTCCT	GTTAGCAGTA	AGTTTTATAT	TGTGGAGGTG	AACAAGGTAT	TTTTGTGTAA	300
ATCAGTTTAC	TAAATTGTAT	TATTTTCAAG	CTAGATTGTG	ACGGTAAGGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

GAATTCGGCC TTCATGGCCT ACGTCTCAGC ATTATGCATT CCAGTTGGTT TTTCCCCATG	60
CTTTTCCTGA GCTGTATCCA AGTGAGTCGT ATTAATTTCA GAGGAGTATT T	111

(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

GAAATTCGGC CTTCATGGCC TANATGAACA AACTCCAGA TACCATTGAT AAGAAATTTT	60
GCATCAAGAA GGGCTTCTGA AAAGACCCAC GTGCTCCAGT CCCAGCTCCA AAAGCCACTG	120
ATGACAAGGG CCCCACTGTG GAACCTAAGT CTGGGAGCCC CCTGACTTCT GGCTGGCCAG	180
AGCTGCGGTC CGTCAAGGGC TTGCCTCGCT TCAGAATCAG TAACATAGAT CTTAAGTGCA	240
ATTGATTAAT AAGCAGTGAG TTAAGTAGC TTCCTTTAGC TCTACCGAAC TCTTTTAA	300
AACTCAAAC TGAGCAGCCT TAGAAAAGGG GTTGGGGGGT GGAACCACAG GCCATTTCTC	360
TAAGTGGGCT GCTGTGAAGT TTTAAATGAA AGCTCTAGCT TTAGGAGCTT GAGCCATTTC	420
CTGACTGCAC TGGCCTGGCA GTCTGGCTGC TGCAGAAGAG TTTTAAAGA GGGGTCGGAG	480
CCCGCCCGTG AGAGCGGGTC TTCTCACCAT GTGGGGCTGT ACTACGTGGT GGTCTTGTT	540
TCTCTTCACA GAAATGCTCT	560

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

AAATTGGGCA GTGGTAGCAC CTGACCCAGG GCTGCTGTGA GGCCCCCTG GGCTGAAGCA	60
CATGTGGTGC AGAGGGCCAG GTTGGGGTGT GAGTGCCAGT TCCCACTGGC CTTAGGCCCC	120
ATCCACTGCT GCTCCCAGGG CCATGGGTGA GCCTTTCCAC TTCTTATAAA GTAGAGAAAA	180
GTATTTATAG TATCTTCTTT GGTAATTCCT TTTTCTGGT GATGTTTCATC TGCAGTTCTG	240
TACATTTTTT CAGATCTTCT GATGAACAAA TTCCTTTAAT TTGTCATGTC AAAGTTGTTA	300
ATATTTTCCT TTGTGACTCG AG	322

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTCGGCT	TCATGGCCTA	CACTGTAGCA	AATTGCGTTG	GAAAAGAACT	AGCTCCACAT	60
GTCAAGAAGC	ATGGAAGCAA	ATTTGTTCCA	GAATCTCTTA	AAAAAGACAA	AGATGGGAAA	120
TCTCCTCTGG	ATGGTGCTAA	TGGTTGTAGC	AGCAAGTAGT	GTTCAAGGAT	TTTCAACTGT	180
CTGGCAAGGA	TTGGAATGTG	CAGCTAAATG	CATCGTTAAC	AATGTTTCAG	CAGAAACTGT	240
ACAAACTGTC	AGATACAAAT	ACGGATATAA	TGCAGGAGAA	GCTACCCACC	ATGCGGTGGA	300
TTCTGCGGTC	AATGTTGGCG	TAAC TGCTTA	CAATATTAAC	AACATTGGTA	TCAAAGCAAT	360
GGTGAAGAAA	ACTGCAACAC	AAACAGGACA	CACTCTCCTT	GAGGACTATC	AGATAGTTGA	420
TAATTCTCAG	AGGGAAAATC	AAGAAGGAGC	AGCAAATGTC	AACGTGAGAG	GGGAGAAGGA	480
TGAGCAGACG	AAGGAAGTAA	AGGAGGCCAA	ACTCGAG			517

(2) INFORMATION FOR SEQ ID NO:1039:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 548 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC	TTCATGGCCT	ACAGAATGAA	GAAAGCAAGC	AGGAGTGTG	GCTCAGTGCC	60
TAAAGTGTCT	GCAATAAGTA	AAACGCAAAC	AGCAGAAAAA	ATTAAACCTG	AAAACAGCTC	120
TTCAGCATCT	ACGGGAGGCA	AACTTGTA	ACCTGGAACA	GCAGCATCAT	TGTCAAAGAC	180
CAAGAGCAGT	GATGACCTT	TAGCTGGAAT	GGCCGGAGGG	GTAACGGTGA	CTAATGGTGT	240
TAAAGGAAAG	AAAAGCACCT	GCCCATCTGC	AGCACCTTCA	GCATCTGCCC	CTGCCATGAC	300
CACCGTGGAG	AACAAATCCA	AGATTAGCAC	AGGCACAGCT	TCTTCAACCA	AGCGGAGCAC	360
TTCTACAGGT	AATAAAGAAT	CCAGTTCTAC	TAGAGAAAGA	TTACGTGAAC	GTACCCGATT	420
AAACCAGAGC	AAAAAACTAC	CTTCTGCAGG	TCAGGGAGCT	AATGACATGG	CATTGGCCAA	480
ACGTTCCCGC	AGTCGAAC TG	CTACAGAATG	TGACGTTCTG	ATAAGCCTCC	CTATAGTGAG	540
TCGTATTA						548

(2) INFORMATION FOR SEQ ID NO:1040:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAGGAAATGG	CCAAACAGAA	AGCAGCTCCT	GAAGCCAAGA	AACAGAAAGT	GGAAGGCACA	60
GAACCGACTA	CGGCTTTTCA	TCTCTTTGTT	GGAAACCTAA	ACTTTAACAA	ATCTGCTCCT	120
GAATTAAAAA	CTGGTATCAG	CGATGTTTTT	GCTAAAAATG	ATCTTGCTGT	TGTGGATGTC	180
AGAATTGGTA	TGACTAGGAA	ATTTGGTTAT	GTGGATTTTG	AATCTGCTGA	AGACCTGGAG	240
AAAGCGTTGG	AACTCACTGG	TTTGAAAGTC	TTTGGAATG	AAATTAAACT	AGAGAAACCA	300
AAAGGAAAAG	ACAGTAAGAA	AGAGCAAGAA	CTCGAG			336

(2) INFORMATION FOR SEQ ID NO:1041:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	AGGCTTCCCG	AGCAGTCTCC	AAACATATAT	TACATTGAA	60
GGTCGCGCCC	GCCCCGCCCC	GCTCGCGATT	TGGCCCTTCG	GGGCCCCCGT	CCTCCACCTC	120
CTTCTCTCCC	ATGATGCATT	GTCTATCTGGC	TTTATCACC	TGTTCTGCCC	TTGAATTTGA	180
ACATGCCAAA	GATATAAGTA	TTGGATTGCA	GTCTTGCAGT	ATTATTTGGT	GAGTTTTTTT	240
TTAATGCATA	CAGCTTTTTT	ATAAGTGCAT	AAATGGGATT	ATATAAACAA	TGTTTAGAGT	300
AGTTTTCTTT	TTTACCCTTT	TGCCTGGTTT	GCTCTTCTTC	CCTATCACAT	CCCTTCCAAT	360
CCATCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 563 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAATTCGGCC	TTCATGGCCT	ACGCCATCTT	CCAGTAATTC	GCCAAAATGA	CGAACACAAA	60
GGGAAAGAGG	AGAGGCACCC	GATATATGTT	CTCTAGGCCT	TTTAGAAAAC	ATGGAGTTGT	120
TCCTTTGGCC	ACATATATGC	GAATCTATAA	GAAAGGTGAT	ATTGTAGACA	TCAAGGGAAT	180
GGGTACTTTC	AAAAAGGAAT	GCCCCACAAG	TGTTACCATG	GCAAACTGG	AAGAGTCTAC	240
AATGTTACCC	AGCATGCTGT	TGGCATTGTT	GTAACAAAC	AAGTTAAGGG	CAAGATTCTT	300
GCCAAGAGAA	TTAATGTGCG	TATTGAGCAC	ATTAAGCACT	CTAAGAGCCG	AGATAGCTTC	360
CTGAAACGTG	TGAAGGAAAA	TGATCAGAAA	AAGAAAGAAG	CCAAAGAGAA	AGGTACCTGG	420
GTTCAACTAA	AGCGCCAGCC	TGCTCCACCC	AGAGAAGCAC	ACTTTGTGAG	AACCAATGGG	480
AAGGAGCCTG	AGCTGCTGGA	ACCTATTCCC	TATGAATTCA	TGGCATAATA	GGTGTTAAAA	540
AAAAAAATAA	AGAGACACTC	GAG				563

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GGCTTGATTG	TTAGAGAAAT	AATGTTGGAA	GAAGAACCTT	CAATAACATC	AGGTGAAAGC	60
CAGACTACCT	ACTCTACTTT	CAGTGCTCCG	TTAAATAAAG	CAAATAGAAA	AAAGTTAATT	120
GAAAGTCTTT	CCCCAGATTT	TTGTCACCAA	AACAAAGGGC	TGTTGCTGAC	AGTTAATACC	180
AGTAGTCAGA	ATGGAAGGCC	TGGAAGAACA	CTTATTAAAG	AAATCCAGAG	TCCTCTGTCT	240
AGTATCTGTG	ATGGCTCCAT	AGCTCTAGAT	GCTGAGCCTG	TTACCCAGCC	AGCATCGCTG	300
CCCAGACACA	GCAGCACACC	AGACCACACC	AGCACACTGG	AGCCTCCTCG	TTTGCCTCAA	360
AGAAAGAACT	TACAAAGTGA	AAAGGAAACT	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GAATTCGGCC	TTCATGGCCT	AAACTGGAAA	TCCTCTAAAT	GTCTGTCAAT	GAAGGAATAG	60
ATAAATTGTA	ATATGTTTAT	ATAAAATGCT	GCATAAATAA	GTGAAATTTA	TAAATATACT	120
AACGAATGAA	TCTTGAAAAC	AGAGTTGGGA	GATAAAAGCA	AGCTGTTGAA	GAACATGGTC	180
AGTATCCTCT	CACTTATGTA	AGTTAAAAAC	TCCAAAGAAC	ATTATCTATA	TTGGTAATGG	240
CATAGACATG	TGTGGTAAAA	TATAAAAATA	TTAACTAAAA	GTTCTATACG	CTTCAGGATA	300
TTGTTAGTAT	AATAAGGCAG	GAAGTGGATA	GCATTGGGAT	GAGAACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 390 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

GATTCGGCCT	TCATGGCCTA	AGCAGCTCGG	GGTTCGGCAG	CAGCGGTCCC	ATCGGCTGAA	60
GTTTCGGGGG	GGTGGGGCGC	CGAGCGCGCG	GGGTGGGGGG	GGTCCTGGTC	TTTGGCTTCT	120
CGACTCGGTC	CTGTTTCGAC	AGCGAACATG	TCGCGGCCTG	TCAGAAATAG	GAAGGTTGTT	180
GATTACTCAC	AGTTTCAGGA	ATCTGATGAT	GCAGATGAAG	ATTATGGAAG	AGATTCGGGC	240
CCTCCCACTA	AGAAAATTCG	ATCATCTCCC	CGAGAAGCTA	AAAATAAGAG	GCGATCTGGA	300
AAGAATTCAC	AGGAAGATAG	TGAGGACTCA	GAAGACAAAG	ATGTGAAGAC	CAAGAAGGAT	360
GATTCTCACT	CAGCAGAGGA	AGCTCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 381 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCGGCC	TTCATGGCCT	ATGAAGCATC	TGGATGGGGA	AGAGGATGGC	AGCAGTGATC	60
AGAGTCAGGC	TTCTGGAACC	ACAGGTGGCC	GAAGGGTCTC	AAAGGCTCTA	ATGGCCTCAA	120
TGGCCCGCAG	GGCTTCAAGG	GGTCCCATAG	CCTTTTGGGC	CCGCAGGGCA	TCAAGGACTC	180
GGTTGGCTGC	TTGGGCCCCG	AGAGCCTTGC	TCTCCCTGAG	ATCACCTAAA	GCCCGTAGGG	240
GCAAGGCTCG	CCGTAGAGCT	GCCAAGCTCC	AGTCATCCCA	AGAGCCTGAA	GCACCACCAC	300
CTCGGGATGT	GGCCCTTTTG	CAAGGGAGGG	CAAATGATTT	GGTGAAGTAC	CTTTTGGCTA	360
AAGACCAGAC	GAAAACTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 318 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GAATTCGGCC TTCATGGCCT AGGGGTAGCC CTTGACCGCC TCCTGCTGGC ACAGGTCTTG	60
GTTCTTGCTT TTGACGCAGT CAACAGCGGC ACAGGCAATC TTTCGGTCAT CTTTGAAGGC	120
ATCAGCAGTA GCAGTAAAGT GCGGAATGAC CTTCTTACAG TGTGGGAACC AAGGGGCGTA	180
GAACATGACC AAGGTGTGTT TCTTCTTCTT CAGGGTCTCC CGGAAGTTGT CCCCCACCAG	240
GTGCAACACG CTTGTCTGCT GCTCTTCCCA CGTGGGCTCT GGGGGCGGGG GGGCCTCAGG	300
GTTTTGCATC CACTCGAG	318

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 591 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

GAATTCGGCC TTCATGGCCT AGCAAATTAT TCTTCAAAT GATTATAACC AGTTGCACCC	60
TGTATTTCTT TTTGCAGCCA GCACAATGTG ACCCAACTTA AAATTTGGGG GAAAAAGAAT	120
GCAGGAGTGA AATAACCAAG TCAAAACCAT GACTATCTC CTGGGGGTT AGGGATGCTA	180
AGAAGAGCCC ACAATAGAG GATTACTCTT CCCCTGAATC TCTAACTCA GAAACAATTA	240
CCAAAAATA CATAACTCTT CTTGTAGGG CCCTTCCTT ATTCATTTAG GTAGTGTGAA	300
CATTAAGTAT AAAATAAATT ATGTTCTTAA TGCTCTTAA ACCACTTACA TTCAAAGGGG	360
AACAGAAATC ATTCTAAGCG GGAAAAACTT CCACCTTTTT TTTTTTCAA GTATCTCTCT	420
AATAACTAAA TGCCACTTAT TTGCATTCTC CTGTGGATT TTTTGTACC TAAGGAAATG	480
CATTTGATGA GTGCTGAAA CTCTTAAGT GCTTACAGT TTGTTTCAT TGTTTGACAG	540
GGATCACTGG ACATCAAAGA TTCATTGCAC TTATGAACAA GGAACCTCGA G	591

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 355 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

GAATTCGGCC TTCATGGCCT AGGTTTCTTG GTGTTTTTGT TTTCTGGCAG GCAGTGAGAG	60
GAGGGGTGAA GGAGGAGTTT GGTGCCATTT CTCTTCTGCT TTTTCTCTCT TCTGATGTCA	120
AACAAATGAT GAAATCCTG CTATGGGAGC CCGGGAGCCT GGGGCCAGGC TGCTGGGGGG	180
ACGGTAGAGG GTGCTCTGCT GACTTGGGGG GTTAGGGGGG TTCTGGGGCG TTGGAGTCCG	240
ACTGGCCTTG GGCCGAAAGA GGCTGCCCTG CTGGGTGCTG GTGCTGTTGG TGACGGTGGT	300
GTGCTCTGGC TCACCCGAGT CGCTCTCCGT GTAGCTGTAG GCCTGTGCCC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

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GAATTCGGCC TTCATGGCCT AATGTGTTAG AAGACTCCCT CTACCTACCT GTTAAAAAAA      60
AAATGACTTT TTTTGCAATT TTTTGCTGTT TCCTTAAAC TAAAGCTGTG TTCTTCTGTT      120
TTGAAGGGTT TCCGCCCCCA ACATATGTTA TCCCCCGCC TGTGGCATT TCTATGGGCT      180
CAGGTTACAC CTTCCAGCT GGTGTTTCTG TCCAGGAAC CTTTCTTCAG CCTACAGCTC      240
TCGAG                                         245

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(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

AATTCGGCCT TCATGGCCTA GGGAGTTTGA GGGAGTTCTT TGGTATGCC GCATCCCGGG      60
GTTGTTTGCT GGTTTATTCT GCCACATTAT CACCTTGGA CGTTTATGGT ACCGGAGATT      120
GTAGGTAAAG TTTGTTTATG CTTCCACGA CCTCCCTCTG TCGGTCCGG ATGGTTTGTA      180
ATTGGGGTTT GCTTTATAGC AGCGAGGCCT GATAGGTAAA GTCTGCTGGC TCACTGTGG      240
CGCCTAGATA AGGGCTTAGA AATGTAAAAA GGCTTGGGGC AGCATGGAGA GGAGTTGCAG      300
AGTGGGGAGG GGCAGGCAGC ACCAAGAAGC TTCTTGAGGC AGTTTGTCCT TAACAGATTT      360
ATTTTCGGAA AGGAATTCTG AACTCTGAGA CCAAATCAGT ATATTGTGT ATATTTTTC      420
ATATACTTCC AAAGTCTTTT AATTCTTAAT TAACCTGATA TTTAAGTGAA AAGGGTTTAC      480
TCTTTATCCT AGTTAATTAC ATATTCCATT TGTTAATGAA ACTATCCTTT GCTCACTGCA      548
TACTCGAG                                         548

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(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

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GAATTCGGCC TTCATGGCCT ACATAATACT TGCTGCTCTT GGGGTGAAG CCGTTGTTAT      60
TTTCTTAGGA GTTAAGTTGC TTTCCAAAAA GATTGGCGAG CGTGCTATTC TACTGGGAGG      120
ACTCATCGTT GTATGGGTTG GCTTCTTTAT CTTGTACCT TGGGGAAATC AATTTCCCAA      180
AATACAGTGG GAAGATTGTC ACAATAATTC AATCCCTAAT ACCACATTTG GGGAAATTAT      240
TATTGGTCTT TGGAAGTCTC CAATGGAAGA TGACAATGAA AGACCAACTG GTATGCTCGA      300
G                                         301

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(2) INFORMATION FOR SEQ ID NO:1053:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 642 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

CGGAGGCCCT GAATGCCCCA TGCGCACCCC ACAGCTCGCG CTCCTGCAAG TGTTCTTTCT	60
GGTGTTCGCC GATGGCGTCC GGCCTCAGCC CTCTTCCTCC CCATCAGGGG CAGTGCCAC	120
GTCTTTGGAG CTGCAGCGAG GGACGGATGG CGGAACCTCC AGTCCCCTTC AGAGGCGACT	180
GCAACTCGCC CGGCCGTGCC TGGACTCCCT ACAGTGGTCC CTACTCTCGT GACTCCCTCG	240
GCCCCTGGGA ATAGGACTGT GGACCTCTC CCAGTCTTAC CGATCTGTGT CTGTGACTTG	300
ACTCCTGGAG CCTGCGATAT AAATTGCTGC TGCACAGGG ACTGCTATCT TCTCCATCCG	360
AGGACAGTTT TCTCCTTCTG CCTTCCAGGC AGCGTAAGGT CTTCAAGCTG GGTTCGTGTA	420
GACAACTCTG TTATCTTCAG GAGTAATCC CCGTTTCCTT CAAGAGTTTT CATGGATTCT	480
AATGGAATCA GGCAGTTTGT TGTCCATGTG AACAACCTCA ACTTAAACTA TTTCCAGAAG	540
CTTCAAAGG TCAANGCAAC CAACTTCCAG GCCCTGGTTG CAGAGTTTGG AGGCGAATCA	600
TTCACTTCAA CATTCCAAAC ACAATCACCA CCACTCCTCG AG	642

(2) INFORMATION FOR SEQ ID NO:1054:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 496 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

GAATTCGGCC TTCATGGCCT ACCTGTGAGT ACCTGGATGA AGCATACCCA GGAAGAAGC	60
TGTTGCCCGA TGACCCCTAT GAGAAAGCTT GCCAGAAGAT GATCTTAGAG TGTTTTCTA	120
AGGTGCCATC CTTGGTAGGA AGCTTTATTA GAAGCCAAAA TAAAGAAGAC TATGCTGGCC	180
TAAAAGAAGA ATTTCTGAAA GAATTTACCA AGCTAGAGGA GGTTCTGACT AATAAGAAGA	240
CGACCTTCTT TGGTGGCAAT TCTATCTCTA TGATTGATTA CCTCATCTGG CCCTGGTTTG	300
AACGGCTGGA AGCAATGAAG TTAAATGAGT GTGTAGACCA CACTCCAAAA CTGAACTGT	360
GGATGGCAGC CATGAAGGAA GATCCACAG TCTCAGCCCT GCTTACTAGT GAGAAAGACT	420
GGCAAGGTTT CCTAGAGCTC TACTTACAGA ACAGCCCTGA GGTCTGTGAC TATGGGCTCT	480
GAAGGGGACA CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:1055:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

GAATTCGGCC TTCATGGCCT AATGTGCTTA ACCCTCAAGA AATGTGCACA ACTGAAAGAC	60
GGGAGCAAGC TGACACTGCA AGGAACACAT GATGCTTTGG AATGGGTGGC CTGCGTATTC	120
AAACACATCA AAGCAGCAGT TACTTGAACA ATCGGAACTT CTTCAAATAC TGGCCCACTT	180

CTTCCTTGGG GTAGGGCCGG AGAGCAATAC AAGTGGCGAT ATTCTCTGGT TGCTCAAGCC	240
ACAGCATGTG GTCAATGTTT TTCTGTTGCA GGGTCTCGGC CAGCTCCTTT AGGGTGGTCT	300
CATCTGGGGC CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:1056:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

CGGGTTAAGG TAGCATCAGA ACCCTGGACG CGGAGTCAGG GCTGGCAGAT AGCAAGGCAT	60
CTCTCGGAGC GTTCTTGGGA GCGCCATCT TGCCCGACTC CATGTTATCC AGCCACTCGT	120
CATCCGCGG AGACAGAGGA GAGAGGAGAG CTCGCGGGGA AGCAGAATTC CCAACCGTTC	180
CATCCAACAA TGGAATCGGT ATCAGGATGT GGTTAGCTCC CTGTACCAGC GAGTGTACAG	240
TCAGAGACTG GCCAGTCCCC TTGTTACAAA CACTGTAGAA GAATGTGACA GCAGCTGCTG	300
TGGCCAGTAG ATTGTCTACC TGTAGTTGCA GAGAAGCCCA AGAGTTTGAT GATGAGGCAG	360
TTCCTCGAG	369

(2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 540 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC TTCATGGCGT ATCTCATTCT GTCTCCCAGG CTGGAGTGCA GAGAAACAAT	60
CTTGGCTCCT GCAGCCTCAA CCTCCCAGGG TCAAGTGATC TTGTTGCCTC AGCTTCCCAT	120
ACAGCTGGAA GCACAGGTGC ATGCCACCAC ACTTGGCTAA TTTGTATTT TTTGTGGAGA	180
TAGGATCTCT CTATGTTGTC TAGGCTGGTC TTGAACTCC CTGACCCCGT GATCCACCTG	240
CCTCGGCCTC CCGAAGTACT GGGATTATAC GCATGAGCCA CCGTGCCAG CCGTCATTCT	300
TATATTATTA TTTCCTAGGT GTCTCTCCTG AAGACTATCT TCTGGTCTG AAATGGACAT	360
GATGGATCCA CGGATGTACA GCAGAGAGCC TGGAGGTCCA ACCGCCGTAG ACAGGAAGGT	420
ATGGCTCTGT TGGATCCGC ATAGTGTGGA AATGAGTTTG CCCTGGAAAG GGAAAGAACA	480
GCTTCTTGCC CTCAGGTTTC TCACCTTCTC CTCTCCTCAC TCTACCAAG GACCTCGAG	540

(2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTTATGCNAN NTTCTTTCA AAAAAAAAAA AGAAAAGAAA TTGCAAAAGT	60
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TCTTCTAAAG	TTAAATCCAA	GGTGGTTTGT	CTAGCAGAGA	GCCAGGAATT	CTTTCTAATA	120
GTGGGCAGAG	CCCAGAGACA	AGGGGAAGAA	AGATGACCTT	CTCCCCAGTC	CTTCCCAGCA	180
CCATTTTGTG	TTCACACCAG	GCTTGTGGCA	TTTTGGTGCT	CACAGGGGTT	TTGCCTTCTG	240
ACCTCTCCTT	GGAGTAGGCC	ATTCTCATGC	AGGGCTCACC	CTGAGGCAGG	AGGACCAAGG	300
GCTCCCTGCG	TCCACGGACC	ACGTATGCCT	TGGTGGTCAC	TCCCATCGGG	GCTATCAGTT	360
CTGCACTGTG	CCCTGGTGCG	GATTTTAATG	CATATTTTTA	TATATAAATG	TTCCCAAAGG	420
CCGTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAATTCGGCC	TTCATGGCCT	AACATTAAGG	AAAAAGCCTT	AATGGCCATG	AATAACCTGA	60
GTGAGAATTA	TGAAAATCAG	GGCCGGCTTC	AGGTGTACAT	GAATAAAGTG	ATGGATGATA	120
TCATGGCCTC	TAACCTGAAC	TCAGCAGTTC	AAGTAGTTGG	ACTAAAATTT	CTAACAAACA	180
TGACTATTAC	TAATGACTAC	CAACACCTGC	TTGTCAATTC	CATTGCAAAC	TTTTTCCGTT	240
TGCTATCTCA	GGGAGGTGGA	AAAATCAAGG	TTGAGATTTT	GAAAATCCTT	TCGAATTTTG	300
CTGAAATCC	AGATATGTTG	AAGAACTTC	TCAGTACCCA	AGTGCCAGCA	TCATTAGTT	360
CCCTCTATAA	TTCTTACGTG	GAATCAGAAA	TCCTTATTAA	TGCCCTTACT	CTATTGAGA	420
TTATCTATGA	CAATCTCAGA	GCAGAAGTGG	CCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:1060:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC	TTCATGGCCT	ACAACCCCGC	GATAACCACT	GCCGAATGCC	TGAAGGCGCT	60
TGAGCACGTG	TTTGGGAGCG	TTGAGAGCTC	TACGGATGCC	CCGATCAAAT	TTCTGAACAC	120
TTATCAGAAC	CCGGGAGAAA	AATTGTCTGC	TTATGTCAAT	CGTCTGGAGC	CTCTGCTACA	180
GAAGGTGGTA	GAGAAGGGGG	CCATTGATAA	AGATAATGTG	AACCAGGCCC	GCCTAGAGCA	240
GGTCATTGCC	GGGGCCAACC	ACAGCGGGGC	CATCCGAAGG	CAGCTGTGGC	TTACCGGGGC	300
TGGGGAAGGG	CCAGCCCCAA	ACCTCTTTCA	GTTGCTGGTG	CAGATCCGTG	AGGAGGAACC	360
CAAGGAGGAG	GAGGAGGAGG	CTGAGCCAC	CCTTCTGCAG	TTCGGCCTGG	AAGGGCACTT	420
CTGAGTGCCA	GGAAAGGCAG	CTTAGTGCA	GACCTAGATC	ACAGCTACCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:1061:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC	TTCATGGCCT	ACCAGCCTCT	GTTAGATATG	TCCAGAGATG	GAAACTCACT	60
CCCCTACAAA	AGATGGAGCT	TAATGGAGAA	ATTGCAACTT	TCATTAAAAA	ACAAATTCAG	120
ATGAAATATC	AGTAACTGTC	TTGGACAGTG	CTGAAATCAG	GTGGTTAAAC	GGGTAAACAA	180
AATATACTGT	ATTTTGAGAA	ATGGCACAAA	AACAGGCAGT	CATCTTTAAT	GGCTATGCCT	240
AGGCAAACTA	CTAACATGCA	TTGTGAGAA	GCCGTGTATA	CCTCACGTAC	TGTGTACTTT	300
GTACATATAT	TTTACCTTTT	ATACCTATGT	TCGATTTTGT	TTTGTTTTGT	CCTGGCGTCC	360
TCGAG						365

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 434 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC	TTCATGGCCT	AGGAGCCGCA	GGGCCGTAGG	CAGCCATGGC	GCCCAGCCGG	60
AATGGCATGG	TCTTGAAGCC	CCGCGTCGGG	TCCCATCCGG	CCCATCGTGC	GCTGCCCCAC	120
GGTTCGGTAC	CACACGAAGG	TGCGCGCCGG	CCGCGGCTTC	AGCCTGGAGG	AGCTCAGGGT	180
GGCCGGCATT	CACAAGAAGG	TGGCCCGGAC	CATCGGCATT	TCTGTGGATC	CGAGGAGGCG	240
GAACAAGTCC	ACGGAGTCCC	TGCAGGCCAA	CGTGCAGCGG	CTGAAGGAGT	ACCGTCCAA	300
ACTCATCCTC	TTCCCCAGGA	AGCCCTCGGC	CCCCAAGAAG	GGAGACAGTT	CTGCTGAAGA	360
ACTGAACTG	GCCACCCAGC	TGACCGGACC	GGTCATGCCC	GTCCGGAACG	TCTATAAGAA	420
GGAGAAAGCT	CGAG					434

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

GAATTCGGCC	TTCATGGCCT	ACTTAATTTT	AGAGCCGGGT	TCGCCGTCCG	ATCAACCTCC	60
AGGAGCTAGC	AGCGGGCGCG	GACCGGGCAG	TTTCCGCGCT	CAGCACAGGC	AGCTCGCGGT	120
CATGGGCGGC	TCAGCCTCCA	GCCAGCTGGA	CGAGGGCAAG	TGCGCTTACA	TCCGAGGGAA	180
AACTGAGGCT	GCCATCAAAA	ACTTCAGTCC	CTACTACAGT	CGTCAGTACT	CTGTGGCTTT	240
CTGCAATCAC	GTGCGCACTG	AAGTAGAACA	GCAAAGAGAT	TTAACGTCAC	AGTTTTTGAA	300
GACCAAGCCA	CCATTGGCGC	CTGGAATAT	TTTGTATGAA	GCAGAGCTAT	CACAATTTTC	360
TGAAGACATA	AAGAAGTGGA	AGGAGAGATA	CGTTGTAGTT	AAAAATGATT	ATGCTGGGGA	420
GAGCTCGAG						429

(2) INFORMATION FOR SEQ ID NO:1064:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

GAATTCGGCC TTCATGGCTT AGTCTTGGTC ATGCCTGGGG AGCTCAGAAC GCCCCGGCTT	60
GGGCCCCAGG CCCATGGACT CCCTTCCCCA TTCTGCCCTC CCATATTCCC CTTTTTGGT	120
CCCAGACACC AGCACAAAGA AAGGAGGGTT CACAGAGGAA GGCCAGGGCA GAGCCTGGCC	180
CCAGGGAGGG GATGAGGACA TTTCCGGTCC AGGTAGCTGC CGGCTGCTCT GGGAGGAAGA	240
GCCATGCGTC TGTAAGTGC TGGGGCTGGC GGCCCCCCC ACTGCAGGGC CCAGCCTTGA	300
CCCCTGCACG TGGCCATCCA GCTGCCCTCT GGCTGCCCTT GGCCTTGGCA CAGGCATCGA	360
GCCTCGAG	368

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

GAATTCGGCC TTCATGGCCT AAGATGGTTG CCAAGCAAGG AAAACTTATT TTATATTTTT	60
ATACTGTATC CAGGCTATGC CTGGGTGTGG AGGGCTTACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 0 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 125 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

GAATTCCTGG CCTTTGGGAA CTCATATCCT GACCTCAGAT TGAGAAGACC ATCTGTCAAG	60
GCAATTAGT AATCACCTCC GGTAGAAAAG ATTTACGGG TAACAAGTAG GCCATGAAGG	120
TCGAG	125

(2) INFORMATION FOR SEQ ID NO:1068:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 340 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

GAATTCGGCC	AAAGAGGCCT	AAGTTCAAAT	AATTTAGAA	TGGTGTCTGT	TAGGAATGGT	60
CCAGAGGTTG	GTTGGGGGAT	GAAAGGAGGA	CAGGGACTAC	AAGGGATATT	GCAAATGACT	120
GCCTTAAAAT	ACCAACATAA	AGCAGTGGAT	TCCCAGAGTC	CTCCAATCTG	TTATCAGACA	180
CAAAGATTTG	AACAAAAATA	AATGAAAGAT	AGAAATCAAA	AGGTTTTCTT	TGAAGTCTCA	240
GGGTTATTTG	CTTCTGAAAG	CAAATGTGTT	GTTCTTGCCT	CATAGCAAAG	TACTTTTCCT	300
ATTGATGCAT	CACTTTATTG	CTTTTCTGTC	TTCTCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:1069:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 432 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

GAATTCGGCC	AAAGAGGCCT	AGACGGGACC	TGTTTGCAGA	CAAGATGCAA	GGAACACAGC	60
CTGCAGTGAT	TCACAGCTTT	GTTTCAACCC	ACAAACCAGA	AAATTAGCTC	TTGGGTCTGT	120
GGGCCCAAAG	TGAACCTTAA	AGCAATAAAG	ACTGGAAGCA	GGTCTGGGAA	GGCAATACAA	180
AATGTGGAGA	GTTGAAAAGG	AGGCAGAGCT	GGCAGGAATG	GGTAGGGAGA	GTGTTTGATA	240
AATAGCACCT	TTGAGTCAAA	ATTGAGCAGT	TTAGAAATCC	AGGAAAGGGG	ACTGGCTGTG	300
GGGAGGAGAA	CCTGGGGGTA	GAGGAAGTGG	GGTGAAGATT	CCTCACTAAG	GGGCAACAGC	360
AGGAGGGTGG	CCATCCTGGC	CAAATGCCCT	AGCCCTGTCC	TTCTTAAGGT	GATTCGGTTT	420
GGGAAACTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:1070:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

GAATTCGGCC	AAAGAGGCCT	ATTCTAGACC	TGCGCAAGCA	CGCTGAGGAG	AAATTCATTG	60
AATTTGAAGA	CTCTCAAGAA	CAGGAAAAAA	AGGACTTACA	GACCCGAGTG	GAATCTTTAG	120
AATCTCAAAC	AAGACAACTT	GAGCTGAAAG	CGAAAAACTA	TGCTGACCAG	ATTAGCAGAC	180
TTGAAGAAAG	AGAAGCAGAA	CTGAAGAAGG	AATATAATGC	ATTACATCAA	AGACACACTG	240
AGATGATCCA	TAATTATATG	GAACATTTAG	AAAGAACAAA	ACTTCATCAG	CTCTCAGGGA	300
GTGATCAACT	AGAATCCACA	GTCATAGTA	GAATTAGAAA	AGAACGCCCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:1071:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 387 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```
GAATTCGGCC AAAGAGGCCT ATTCTGTCTT ATCAAAGGAA GTAAAGAAGT AAAAACAAAA    60
AATGAACGTA TACAAGCACA GATTTTGTAG CTTGATTGT AGAGAAATGG TAGTTATGTG    120
GCTTGCCAAG AAAGTGCATC ACCTACTTCT GCTTCTGGGG ACAGAGGTGA AGGGGTCTGT    180
TCTGGAACCT TCTAAGGAGG CCATCTTCGT TATTACATCA GGAAGTTTC TAGTCAAAAT    240
GTTATTCCTG TCTACAGGGA AAAACAAAAG CAAACACAA AAGAACACTG CTTCTAATGG    300
CATCATAGCA AGGAGTTTAT CTAGAAAGAT GATGCCAGCA GTCACCTCTT TTCCAGGAAG    360
ACAGAAACAA AAACCGTTCT CCTCGAG                                     387
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(2) INFORMATION FOR SEQ ID NO:1072:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```
GAATTCGGCC AAAGAGGCCT AGAAAGTGCC AAGAGGGAAA AAAGGCACTC TGAGAAGTTA    60
CGGCAAAGAA TTGGGAAAGT TGTCAAAACA AACAAACAAA AAATAATAGA TTTGTTTTAG    120
CAAACGACTT GGCTAAAAGT TACAAACCTA ATATATGTAA TACACAAGAC TACTTCATCA    180
TCTTTCTTTC TGACAGTCTC ATGTTCTTTT TCAAGCCAAA AAGGGACATA TTCTTATAGC    240
TGGAAGTTTA AGGGAAAGAC TTCCAACCTA ACTCTGTGTT GAGGGTGCAA ATCATGTGAT    300
GAAGGCTCGA G                                     311
```

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

```
GAATTCGGCC AAAGAGGCCT ACGAAGAAAA AATATTTTTG AGAGAATTC CCAGATTGAA    60
AGAAGATCTG AAAGGGAACA TTGACAAGCT CCGTGCCCTC GCAGACGATA TTGACAAAAC    120
CCACAAGAAA TTCACCAAGG CTAACATGGT GGCCACCTCT ACTGCTGTCA TCTCTGAGT    180
GATGAGCCTC CTGGGTTTAG CCCTTGCCCC AGCAACAGGA GGAGGAAGCC TGCTGCTCTC    240
CACCGCTGGT CAAGGTTTGG CAACAGCAGC TGGGGTCACC AGCATCGTGA GTGGTACGTT    300
GGAACGCTCC AAAAATAAAG AAGCCCAAGC ACGGGCGGAA GACATACTGC CCCCCATGAC    360
CCTCGAG                                     367
```

(2) INFORMATION FOR SEQ ID NO:1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

```

GCTTTATCTA TTTCATTTAA TCTAAATGTT TTCTGCAATT GTTTTTCCTT TAAACTTTGC      60
TTCAAAAACCT CTTCATCTAC TTGAGATCTG GGCATTGTGG TTTTGGTCT CGCATTTTCC      120
CTGCCTTCTG ATGGCTTAGC AGGGGACCCT TTCTTCTTTG GCTGGTGGGG CTCTCTGGA      180
TCAGTAATGT CCACATGCGG CTTCTGCAGC AAGGTTTCT CTTTGTCTGA TACTGTAAC      240
CGGGGGGCTC TGTTTTCAAA GGAATGAGAG GCCTCTGGTT TTCGAAGCCC CCCTCTGCCT      300
TTGCTCACCA CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

```

GAATTCGGCC AAAGAGGCNT AGAACTCGGA GACCAGAAAG TGAACCTCTG GGCAGAGATG      60
GNCCTGCAGA GCCAGGTGTG GTCTCTGGCC ACACCCATGC CCATGGCGGA GAGCTCCNTC      120
TACCGGCAGC GGCTAGAAGT CATCGCTGTA AGTGACGCCC TCCCCGCGCC CTGGGCACCC      180
CCAACTTTC CACCATGCTC CTTTCTCGTC TCTCCGTCAT CTCTGCGGAG AGCGCCCTCA      240
GCTCCAGCCC CGCCCAGGGC TCCCCACACC AATTCTCCAG CCCCCTCTGC CCCCAGTTC      300
CTGTCTGGTC ACTACCACCC TCAGAATGGG GAGCTGTGGC CCCCACACTT CCAGAGCCTG      360
CATCGGCTAT GCCTCATTCC TGAACCCAG CCTCCCAAAA ACCCCATGCC TGAGCCGCAT      420
TCCCGGACC TCGAG                                     435

```

(2) INFORMATION FOR SEQ ID NO:1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

GGAATTCGGC CAAAGAGGCC TAGTGGGAAA AGCTTGGATT ATCAAAACAC ACAACAAATG      60
ATAGAACCAA ATATATAGAT GATACAGTGA AGCACAAGGT CAAAATTTTA AAACGGGTGA      120
GCTCTTCATT AATGCATTAT TTTGTTTATT TAAGAGCTTT TTGTATGGAC TGACTGCAAT      180
AATTTTGAAA TTTCTCTTTA GAAGTTTAA TGTCTTTTA CATTTTCAA TTTAGTTTTTC      240
CATGAAAGTG AATAGTTTTT TATTAAAT TTTTGTGTCAG TCTTGGTGAA ATCAGATGGT      300
GACTCTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:1077:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 396 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

GAATTCGGCC AAAGAGGCCT AGGAAAACAA ATGGCTTCTT CAAGTCCTTG ATTTTGGAT	60
ACACAGGATG CAGGGCTGTG TGTAAGGAAA GGCAGCGTTT TCCTCTCTTA GAGCCTCTGA	120
CTGACCTGAG GCGCAGGTGT TCCTGGGAGA CTGGAGGGTG GGCTCCATGG GGGTGTCTGG	180
GCCCCACCTG GCAGGGCTCT TGGCAGTGAG CCAGTGGAGG TTGCCTCCCA CGTGTGGCTG	240
GCCCTGTAGC CTGGCTCTGG AGAACCTGCA ATTCAGGCTG GAAGAGACTT TGGAGCAGCT	300
GGAGTGTGAG GTCTGCCTGG GTCTGGTGGG GAGTGTTTTT ACTTTGCCAG TGATAGACTG	360
AAATGCCCTC TTTGAGGACA AGGTGGCTAT CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:1078:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

AGTGTTTTCC TGTATTTCAG CATATTCTTT GAAACTCTGC TGAAAGGAGG CTGTCACTCA	60
GGGTTGTATA AATAGAGTCC TGGGTAAATC CTTGAAGCTT GTCATTCCAC AGCAAATCCA	120
CATGTTTCTT CAATGGCTGT TAGCAGCTTT TCATATAGCT TTTCATAGCT TTCATAGGGT	180
GGAATGTCTA TTCGATTGAA GCAAGTGTGG GCTTTCGGCA GGTGTGTAGT GCAGGCATCA	240
ATCTGGTGTA TGGTAAAGAG TCTCGGGCCT GCAGCACCTT GCAATGCTTT GAAGCCCTGC	300
AGAGGCACTC GAG	313

(2) INFORMATION FOR SEQ ID NO:1079:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AAAAATGAAC TATAATAGTT CTAATTTACC TCAAGTTTTT	60
CTAAGATAGC AAATAAATTG TAGTGTCAAC TTAGCTTCCT AAGTAAGGCA AATTGACCTG	120
CAATAAAAGG TTCTAGTGTG AGACAAATTA AACCTTCAAC TTCCAACCTC GATTTCTAAT	180
ATAATTCAAA TTGTCAGTGA AGCTTTTATT AAGAATAAAA ATATATTTAG TCTTTATTAT	240
TTCTGTAAA TGACTTATTT TCAGATGCAC AATCGTGAAA TAATGAAGAT TTTGATCAGT	300
TGTTTTTGTC TTTTCCTTT GAAAGGTATT TTCGCAAGAC CATTAAACT CGAG	354

(2) INFORMATION FOR SEQ ID NO:1080:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 641 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

```
GAATTCGGCC TTCATGGCCT ACTCCGGTGG CTCCCCCATC TCTCAGGCGC GATGGCTACG      60
GGCGCGGATG TACGGGACAT TCTAGAACTC GGGGGTCCAG AAGGGGATGC AGCCTCTGGG      120
ACCATCAGCA AGAAGGACAT TATCAACCCG GACAAGGAAA AATCCAAGAA GTCCTCTGAG      180
ACACTGACTT TCAAGAGGCC CGAGGGCATG CACCGGGAAG TCTATGCCTT GCTCTACTCT      240
GACAAGAAGG ATGCACCCCC ACTGCTACCC AGTGACACTG GCCAGGGATA CCGTACAGTG      300
AAGGCCAAGT TGGGCTCCAA GAAGGTGCGG CTTTGGAAAG GGATGCCATT CACCAACCCG      360
GCCCGCAAGG ACGGAGCAAT GTTCTTCCAC TGGCGACGTG CAGCGGAGGA GGGCAAGGAC      420
TACCCCTTTG CCAGGTTCAA TAAGACTGTG CAGGTGCCTG TGTACTCGGA GCAGGAGTAC      480
CAGCTTTATC TCCACGATGA TGCTTGACTT AAGGCAGAAA CTGACCACCT CTTTGACCTC      540
AGCCGCCGCT TTGACCTGCG TTTTGTGTT ATCCATGACC GGTATGACCA CCAGCAGTTC      600
AAGAAGCGTT CTGTGGAAGA CCTGAAGGAG CACTGCTCGA G          641
```

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 415 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

```
GAATTCGGCC TTCATGGCCT AGCCCTTTTT GGTCTTCTAA TTAGGAATAT AGCATCTGCA      60
AATAATGACA GATTGTTTCT TCTTTTCTAA TTCTTACAAC TTTTGTTACT TTTTCTTGTC      120
TAATATGCTG CCTAGAACTG TAGAGCTTCC TGCTCTTGTT CCTCCCTTTT TTTTATCTCT      180
ATTTTTAGGA GCAACCCTAT TAACTAAGCC TCACTCTTAA AGGGGAAGTT TTCACCACTA      240
AGTACCTTTC TAATCTAGGT TTTTGTGGA TACCTTTTAT CAGACTAATG AAGTTTAATA      300
TTGTTAAATA CTTTGAATTG TCTATATTAT GATGATAGTA TGCTTTTTTC TTTTATTTAT      360
TAAAATGGTC CCAGGAATTT GTGAACAGCT TGGGCAATAC AGTGTGACGC TCGAG          415
```

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 496 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```
GAATTCGGCC TTCATGGATC CTGATACCAA ACTCATCGGA AACATGGCAC TGTTGCCTAT      60
CAGAAGTCAA TTCAAAGGAC CTGCCCCCAG AGAGACAAAA GATACAGATA TTGTGGATGA      120
AGCCATCTAT TACTTCAAGG CCAATGTCTT CTTCAAAAAC TATGAAATTA AGAATGAAGC      180
TGATAGGACC TTGATATATA TAACTCTCTA CATTTCCTGAA TGTCTGAAGA AACTGCAAAA      240
GTGCAATTCC AAAAGCCAAG GTGAGAAAGA AATGTATACG CTGGGAATCA CTAATTTTCC      300
CATTCTTGGA GAGCCTGGTT TTCCACTTAA CGCAATTTAT GCCAAACCTG CAAACAAACA      360
```

GGAAGATGAA GTGATGAGAG CCTATTTACA ACAGCTAAGG CAAGAGACTG GACTGAGACT 420
 TTGTGAGAAA GTTTTCGACC CTCAGAATGA TAAACCCAGC AAGTGGTGGA CTTGCTTTGT 480
 GAAGAGACTA CTCGAG 496

(2) INFORMATION FOR SEQ ID NO:1083:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC TTCATGGCCT ATTCACAGGT TTATTGGCTT CTTCTTGAAA TGCCTGTTCA 60
 TGTCTTTTGG CCACTTTTAA TATGGGTCAT TTGTCCCTTA TTGATTTATA AGGGTTCTTT 120
 ATTTTTTCC TAGATATTAA TAGTTTGGC CAGATGTTTG CAGATGCTT TTCTCAATAT 180
 GGCTTGCTCT TTCAGTTTG GTGTCTGTAT GATCAGAAGA AGTTCCTCAT GTAGTTGATT 240
 TATTGACCTT TTCCATTATG GTTTTCACTC TTTGACTCTA GGAGCTTAAT AAAAGCATGA 300
 AATATTTATT GATTGTCCAT TGCTAATCCG AAAACCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1084:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 374 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAATTCGGCC TTCATGGCCT AACTTACTGA ATGATAAAAC TTGCAGCTAA ATTTGTCTTC 60
 AACACACCTT TCTCAGAGCA TCAATTACAT TATTCATTAA GGAATAAATA GCATCTCTAA 120
 AGCATGTATC AACATCAGAA CTAAGCTTTA TGAATTATAC AGTGCATCTA GTGATTCCTT 180
 ATTCTAAAAG ATCTCTGGTG CCATCTACTG AATGCTTTTT AAAGGAAAAA ACATGAAATC 240
 AAATAATAGA TTTTCACTTA ATTCAATTTT TTGTTTTGTT TTAATTTTCA ATTACTAGAC 300
 AGATCTAGGT TTATAAAAGA ACTAAACAGG AAGTACAGAA TTCCCATATA ATCACTTTTC 360
 CCCAAGACT CGAG 374

(2) INFORMATION FOR SEQ ID NO:1085:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

GAATTCGGCC TTCATGGCCT ACTGGAACAC CTTCTCGCTG CCGCCATACC CTGCCTTCTC 60
 CAGCGACAGC CGCCCGTTCA TGAGCTCCGC CTCCTTCCTC GGCAGCCAGC CCTGCCCAGA 120
 CACCAGCTAT GCCCCGTGG CCACCGCCTC CAGCTTGCCA CCAAAGACCT GCGACTTTGC 180
 TCAGGACTCC TCCTATTTTG AGGACTTCTC CAACATCTCC ATCTTCTCCT CGTCCGTGGA 240

CTCCCTGTCG GACATCGTGG ACACGCCCCGA CTTCTGCGG GCTGACAGCC TCAACCAGGT 300
TGCCACCATC TGGGACGATA ACCCTGCCCC CTCCAACCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:1086:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 531 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

GAATTCGGCC TTCATGGCCT AGGGCTGACG CGCCACTATG TAGCGGGTTT CGGGCGGGCC 60
 ACGCGTGCGG GACAGGAACC CAACCCAGC CGACCTTGAG CTCCAGGAGT TCGTCTCTTA 120
 CGTCTGCGGA AGTGCAGCTG CCTCAGTTCT TAGCGCAGGT TGACAACTAC AGGCACAAGC 180
 CATTGAAGCT GGAATGTCCT GTTGCTGGTA TTTCAATTGA CTTAAGCCAA CTATCCCTTC 240
 AGTTACAATA GGAAAGTGCC TCTAATAAGG CCAAATATGC GTACTAATT GTAGCAACCA 300
 CGTGTCGGTG CAGTGCCACA GGAGCTAGAG CAGTGACAAT GCTGGTGGCA ACAGGGCAGT 360
 GTAGCAGGTG CTTTCATGTT ACCTTTTCAA CCTTTTCATT TAATTGTCAC AACTCGGAGG 420
 TGGATTCTGT TAGGGACAGG CTGCCCCAGG ACCACTCCGC CCCCCTAAC TCAATGCAGC 480
 TGACCCTTAC CCTGAATACT CTGCAGCTGC ATTCTGAAC CATATCTCGA G 531

(2) INFORMATION FOR SEQ ID NO:1087:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 374 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

GAATTCGGCC TTCATGGCCT ATGACTAGCC ACCAGGAAGG ACATTCCCTG CTCAGCTGTC 60
 CCATTAACGT CACCTGCTCC TCTCCTCCAC GTTAGTTTTC TTCTAGCCTG TTTATTCCTC 120
 CCTGTAAGAG AAAAAGAGAA AAGCCTATTT CTATCTGATC TTTGAGATGC TTGCAGATCT 180
 TACCTTTGAA GCATTCTCCT TATTGCAATA GTCTCCCTGA CCCTATTGCA ATAGTTCCCTC 240
 TCTCCCTGTT TGTATTACC CATTACGGCT GCTATATATA GCAAAATACC ATAAGCTGAT 300
 AGCTTATAGA CAATATAAAT TTAATTCCCA CAGTTCTGAA GCCCGGAAG TCAAAGATCA 360
 AAGTAGGCCA TGAA 374

(2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 288 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAATTCGGCC TTCATGGCCT AGGAATGTTT CCTTTTGGTT CATTGTAGGC ACATCTGAAA 60
 AAGAAGTTAT GAGTCACTCG TAGTGAGGTT TTAATTGACC TGTGACTTGG GATCTCTGGG 120

GATCATTGGC AGTCTGTCTT AACTGTGTAT TTATAATTCA TGTCTGATCA TCTTCTTAAG 180
 GAAGTCTGCA TCGTTTGCCT TATGTAGAGC ATTAAACACA AGGATCTGNC ACATTACTTC 240
 TGTTCGCATT TTTGCTTCTC ATATCCCTGA CCACCCACCA CACTCGAG 288

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC TTCATGGCCT AAGTAGTTAA ACTCATAGAG TTGCAAAC TA GAAAGGTGGC 60
 CCCCAGGGGT GGGCAAGAGA GAGGAGTGGA GAGCTTGGTG AATGGGTGCC ATTTCCATTT 120
 TGAAAGATAA AACTGTTC CG GAGACGATGA CCGTGATGGT TGCTAAACAA TGTGAACGTA 180
 CTTAATGTCA TGAACTGTA AACTGAAAAA CAGTGGAAAT TGTAATGTT TATACTGGCC 240
 ATTCTATATG AACTAATATA TATTTATAAT TTTTAATATT TATACATGGT ATATTTTCCC 300
 ACAATAAAGA TGAAAATTAA AGCAGTTGGT CTCGAG 336

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GAATTCGGCC TTCATGCCTA CAGAGGCGAA AGGAGAGTCC AGTGAGAAAC CAGCCATTGT 60
 CTTTCATGTAC AGGTGCGACC CTGCTCAAGG CCAGCTCAGT GTGGATCAGA GCAAGGCTAG 120
 GACAGACCAG GCAGCAGTCA TGGAGAAGGG TAGAGCAGAG AATGCATTAC TACAGGACTC 180
 AGAGAAGAAG AGGAGTCATT CTTCTCCATC ACAGATTCCCT AAAAAGATTTC TCAGTCACAT 240
 GACCCATGAA GTAACAGAGG ATTTTCTCC TCGGGATCCA AGAACTGTTG TTGGGAAGCA 300
 AGATGGCAAG GGCTGCACTT CAGTCACAAC AGCATTGTCC CTACCTGAAC TGGAAAGGGA 360
 AGATGGAAAA GAAGACATTT CAGATCCTAT GGACCCGAAC CCTTGTAGTG CAACATACAG 420
 CAACTTAGGG CAATCTAGAG CAGCCATGAT ACCTCCCAAG CAGCCACGAC AGCCCAAGGG 480
 AGCTGTGGAC GATGCCATCG CCTTGGAGG GAAAACAGAC CAAGAAGCAC CCAATGCTTC 540
 CCAACCTACA CCACTCGAG 559

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC TTCATGGCCT ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTACG 60

AAGAGGATTA	TTATACACCA	CAAAAGGTAA	AATCAGAAGC	AACTTATTTT	TAAAACCTAT	120
CTTAAGTCGC	ACAGACTCCA	TAATATGTCC	TCTTTCCTTG	GCTCTGTTGT	ATCAAGGTGT	180
TTATTTCCGA	AGTGTTCCT	GTTTGGGAGA	CTGACAAATT	AGGATTCCTG	ATTTAGCACC	240
CTGTGGTCTT	GTCATCTGAC	CAAATCACAG	AAAATTGAGA	AAGTGGATAC	AGCGACTGTG	300
GACATTGTGA	AGTCACATCT	TACTCAGGGA	TGACAGCTAA	AATCAGCGTG	TACAGCAGAA	360
AAGTCACATA	TAGCTACAAA	TACCCTGGAA	AACTCGAG			398

(2) INFORMATION FOR SEQ ID NO:1092:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 436 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GAATTCGGCC	TTCATGGCCT	ACGAGTTTTC	TGCAAGTCAG	CCATGAAGTC	TATGCTCTGC	60
TTCAGGCTCT	GAATTCCTTC	CTGGCTAAGA	ATTTTCATTC	CTGAGTGCAA	CAGCTTCTTT	120
GCAGCTTTAT	AATAAATGGT	CTCTGGTTTA	TTGTAAATCA	TGGCATTAGT	ACACATTAGT	180
TTGAAGTTAT	CCTTTAGTTC	TTCTATGGAC	TGATAGTCAT	TGTTCTTGAT	CTTTTCTTTC	240
ATGGTACTAA	AATCCATTGG	GTGTTAATG	ATCATGGAGT	AGCCAGGAGC	AATAAAATCA	300
GTCACAGGAA	ATGAAAAGAA	AGCACTTGGA	TCTTTCTCT	GCAATTGTCT	CATCAGTTGA	360
TTCAAAGCTT	CTTGAAGGGG	TGTCTGTTCT	ACTTCTTCTT	GTTTGCTAA	AGAGCTTGTC	420
AGAGGCTTCG	CTCGAG					436

(2) INFORMATION FOR SEQ ID NO:1093:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 390 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GGGGCAGGGA	GCCTGGCCAG	GCCTGAGACA	CAGAGGCCCA	CTGCGAGGGG	GACAGTGGCG	60
GTGGGACTGA	CCTGCTGACA	GTCACCCTCC	TTCTGCTGGG	ATGAGGTCCA	GGAGCCAACT	120
AAAACAATGG	CAGAGGAGAC	ATCTCTGGTG	TTCCACCAC	CCTAGATGAA	AATCCACAGC	180
ACAGACCTCT	ACCGTGTTTC	TCTTCCATCC	CTAAACCACT	TCCTTAAAAT	GTTTGGATTT	240
GCAAGCCAAT	TTGGGGCCTG	TGGAGCCTGG	GGTTGGATAG	GGCCATGGCT	GGTCCCCCAC	300
CATACCTCCC	CTCCACATCA	CTGACACAGC	TGAGCTTGTT	ATCCATCTCC	CCAAACTTTC	360
TCTTTCTTTG	TACTTCTTGT	CATCCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:1094:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 559 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

AATTCGGCCT	TCATGGCCTA	GAGGGATTG	TTAACCAGTG	CCACCATGTA	GTTCTGGAAA	60
CGGAGGATGC	GGTGGTAGAT	GTCCAGTTCT	GTCCAGTCAC	GTTTGTGGAT	GCAGATCTGG	120
TGCTCCTTCT	GCGTCTGCAC	GATCCGGGCC	TGCACTTCTT	GCCACGTGCA	ATACGGAAGG	180
GCAGACATAG	GGATGCGCAG	AGCGTGCAGG	TAGAAGGAGT	GGATCTCCCA	GTAGCAGCAA	240
ATGTTATAGA	TGAACCTGAT	AAGCCGGTGG	ATCCAGAAGA	CACCAGCAAT	GACCAGGATG	300
GTGATAAGGG	AGCCATTTTC	CTGAATCCTG	GCACTACAGA	CTTGAGCAGG	CAAAAAGGCG	360
TCTGGCAGAG	TGACCTTGAC	GGGTTCAGTA	GGGTGAAGAC	TGTGGTTCAC	CATCTTGTG	420
GCAAATAGGA	TGTCATAGTC	CACGCAGCTG	ACCAGGAAGG	TAGTGAAGGC	AACCACAAAG	480
AGGAAGTGA	TGAGCTCAAA	GATCTCCCCG	ATGAGCATAC	ATGTGAAGCC	ATTCTTCTGG	540
TGCAGATTAT	AAACTCGAG					559

(2) INFORMATION FOR SEQ ID NO:1095:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 224 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

GAATTCGGCC	TTCATGGCCT	AGGTTTGGAA	AGTAAGACAT	ACTGGCTTCC	TTTATTCACA	60
TTAGCATTTC	CCTATTATTT	TGGAACCAAC	AATTCATGT	TCATTGAATT	TCCTTTTTTT	120
TTTTTTTTTT	AAAGACTGCA	AATTTTGGCT	GGGCACAGTG	GCTTGACTCT	GTAATCCTAG	180
GTAATTAAGA	GGCTAAAGCA	TGAGGATCAC	TTGAGGGACT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:1096:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 534 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

GAATTCGGCC	TTCATGGCCT	AGTTCTCTCT	GATTTGGTTT	GTTCTGTCTC	AGGCTTCTGT	60
GGCAGGACTG	GCCCAGGGAG	GAGGAAGCCA	GCAGCACACC	TGGGGAATGG	GGTCCCCGCC	120
GGGAGGCTTG	GCCTCTGGGC	GACCTCGTCC	TGTTTTGTTT	GTTTGTGTTG	TTGTTTTTTT	180
AAAGGTAAAC	CTCCTGGGCC	GCAGATGGCA	AAGGGAGTGC	CTGGGCCTGG	TGACCCAGGG	240
CTGGATCCAC	CCCTGCGGAG	CCCTGGGCCA	GGCAGGTGTC	TGCTGCTCAC	CTGGCTCTGG	300
AGGGCTGCCC	TGCAGCTGGG	CCTGGGGACA	GGTCGGCTGT	GGGGCAGCTC	AGTACCCTCC	360
CTGAGGCTCA	CGGTGGCTCC	GAGCATGAGC	TCTGCCTCCT	GGGCAGAGCC	CAGCAGTGGA	420
CAGCACGGTC	CTCACACCCA	GCTCCCTGCA	CACCCAGGCC	AGCCACCCCT	CCCGCTCGTG	480
CACAGGCACG	CAGATGCGCT	CACACGTACA	CACACACAAA	TGCAACGCCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:1097:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 606 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	ACTTTATTGG	TGGACATTAA	GAATGGAGGA	ATGTTTCAAC	60
AAAGGAACAA	TCAACAGTAT	CAAAATACTG	CAGAGGGGTC	AATTTGGGGA	CTAAGAGGGG	120
AGCCACTGGA	TTTGACAAC	AGGAGATAAA	TTTGTAGTGA	ACGATGAAGG	CAGAATCCAG	180
AGTATAATGA	GCTCAGTGAA	AAAAGGTGAA	NACATGTAGC	TTATTCTCTC	AAGAAACTAG	240
GCTATGATAA	ACTGGCAGAG	GCTCTAAGAG	TGGGAGGTGA	GTTGTTTCT	CCTTCATGTA	300
AATATATTTA	CCTTTTAAAC	ACTAGGCCCA	ATTTTATATC	CTATTTCATT	TAACTTTATG	360
AACATATTTA	TGTATGTATG	CATGTATGTA	TGTATCTCAT	GTGATGTTTT	AGACACTGAA	420
AAATAACTCA	TTTCTATTAT	AAAACGATA	TCTTTAGATG	TTTCAGAAGC	AACTTCCTAA	480
AAGGAGGTAG	CAGTAATGGA	GCTATGTCTA	TCATTCTTTC	CCATCAACCC	CCTTGATGGA	540
GATGTAAACA	TGTGTCCATC	AAGCCTTTAA	TTTTTACNTC	TTATCTTCAG	GGCTCTGCCG	600
CTCGAG						606

(2) INFORMATION FOR SEQ ID NO:1098:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	AGCAGAACAT	GGATATTTTT	CCTTTAATAT	TTAGTACTTG	60
GGCTATCATG	AAACAAGGTT	AGCATAACCA	TCCAAAACCC	CAAGTGCTCC	AAAATCCAA	120
ACTTTTTTAA	CACCAACACG	ATGCCCAAAG	TGGAAGATTC	CATACTTGAC	CTCATGTGAT	180
GGGTCTAAGT	CAAAATGTAG	GCAAACTTT	CACGCACAAA	ATTACTTAA	ATATTCTACT	240
GAGCCAGGCA	TAGTGGTTCA	TGCCTATAAT	CCCAGCACTT	TGGGAGGCTG	AGATGCCAAT	300
TGCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1099:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 484 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCGGCC	TTCATGGATG	ACCGCAGCAG	GCTGGTCAAG	CAGATGGAGG	ACAAGGTGTC	60
TCAACTGGAG	ATGGAAGTGG	AAGAAGAGAG	AAACAACCTCA	GATTTGCTGT	CTGAGAGGAT	120
CAGTAGGAGC	AGGGAACAGA	TGGAGCAGTT	GAGGAATGAG	CTACTTCAGG	AGAGAGCTGC	180
GAGACAAGAC	TTGGAGTGCG	ACAAGATTTT	CCTGGAGAGG	CAGAACAAGG	ACTTAAAGAG	240
CCGGATTATC	CACCTGGAAG	GTCCTACAG	GTCCAGCAAA	GAGGGGCTGG	TTGTGCAGAT	300
GGAGGCCAGG	ATCGCGGAGC	TGGAGGACCG	CCTGGAGAGT	GAGGAGAGGG	ATCGGGCCAA	360
TCTTCAGCTC	AGCAACCGGC	GGCTGGAGCG	GAAAGTGAAG	GAGCTGGTGA	TGCAGGTGGA	420
TGATGAGCAC	CTGTCATTGA	CTGATCAGAA	GGACCAGCTG	AGCTTGCGTT	TGAAACCCCT	480
CGAG						484

(2) INFORMATION FOR SEQ ID NO:1100:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

GCAGATTGAG GACCTCCAGA AATCTTTACA GGAACAAGGT TCCAAGTCTG AAGGCGAAAG	60
TTCCAGCAA ATTAAAGCAG AAGTTGGAAG CTCATATGGA AAAACTCACA GAGGTCCATG	120
AAGAATTACA GAAGAAACAA GAACTCATTG AAGATCTTCA GCCAGATATA AATCAAAATG	180
TACAAAAGAT CAATGAACTT GAAGCTGCTC TTCAGAAGAA AGATGAAGAT ATGAAAGCAA	240
TGGAGGAAAG ATATAAAATG TACTTGGAGA AAGCCAGAAA TGAATAAAA ACTTTGGATC	300
CCAAGTTAAA TCCAGCATCA GCTGAAATAA TGCTACTAAG AAAGCAGTTG GCAGAGAAAG	360
AGAGAAGAAT TGAGATTCTG GAGAGTGAAT GCAAAGTAGC AAAATCCGT GATTATGAAG	420
AAAAACTCGA G	431

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 557 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

GAATTCGGCC TTCATGGCCT ACTGGGAATC TCTCAGCAGC TTTTGGCCAA ACAGATGGGC	60
CAGGAGCCGC GGAACCAGGC TGAGGAATGT TGCCTCACGA TCTCTCATAT CCATTCCTGG	120
CACCCACCAG CCCAGGGAAT GCCTCTACCA GTTGTCAGCG AGAGGCTTAC ACAGCATCTT	180
AAATAAAAGG GATTATTGAA CCAAGAGGCC AGGGACTGAT GGAAATGCCC ACCTTGCTGG	240
CTCATTGAAA AAGTTTGGCA AGGTTGTCAG GAGACATGAA TTAGATGGGC TTGGGTCTTG	300
TGCCCTTTGC TAAACCAAGT GCTGTATTGG GAAAGAGACG GGGAGAGAAG TGTTGGAGAT	360
GCTCTTTAGT CAGGCCTGAG TCACTTGCCC AACCTTGGAG TTGGAGTTGG GGATGGAGCC	420
AGGATCTCCA AACCACATGC CCCTAGAGTT TCAGGGAAAA TATGGATTGT GAATTGAAGA	480
TGGGGGGTGA TGTAAGGCAG ACAAGGACAG AAAATCCCTC TTCCAGCTGT GATTTGGCTG	540
TGAGTTTGGC GCTCGAG	557

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 577 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

GAATTCGGCC TTCATGGCCT AGTTTCTTA GAGTGAATTA TAGTATTGAC GTGAATCCCA	60
CTGTGGTATA GATTCCATAA TATGCTTGAA TATTATGATA TAGCCATTTA ATAACATTGA	120
TTTCATTCTG TTTAATGAAT TTGGAAATAT GCACTGAAAG AAATGTAAAA CATTTAGAAT	180
AGCTCGTGT ATGGAAGAAA GTGCACTGAA TTTATTAGAC AAAGTTACGA ATGCTTAACT	240
TCTTTACACA GCATAGGTGA AAATCATATT TGGGCTATTG TATACTATGA ACAATTTGTA	300
AATGTCTTAA TTTGATGTAA ATAAGTCTGA AACAAGAGAA AATGTTTTTA ACTTAGAGTA	360
GCCCTAAAAT ATGGATGTGC TTATATAATC GCTTAGTTTT GGAAGTGTAT CTGAGTAACA	420

GAGGACAGCT	GTTTTTTAAC	CCTCTTCTGC	AAGTTTGTGG	ACCTACATGG	GCTAATATGG	480
ATACTAAAAA	TACTACATTG	ATCTAAGAAG	AAACTAGCCT	TGTGGAGTAT	ATAGATGCTT	540
TTCATTATAC	ACACAAAAAT	CCCTGAGTGA	CCTCGAG			577

(2) INFORMATION FOR SEQ ID NO:1103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

GAATTCGGCC	TTCATGGCCT	ACATGGACCT	CCTGCACAAG	AACATGAAAC	ACCTGTGGTT	60
CTTCCTCCTG	CTGGTGGCAG	CTCCCAGATG	GGCCCTGTCC	CAGGTGCAGC	TGCAGGAGTC	120
GGGCCCAGGG	CTGGTGAAGC	CTTCGGAGAC	CCTGTCCCTC	ACCTGCACTG	TCTCTGGTGC	180
CTCCATCAGT	AGTGGTGGTT	ACTACTGGAG	TGGATTTCGT	CACCACCCAG	GGAAGGGACT	240
GGAGTGGATT	GGGCGAATCT	CTCACAGCGG	GCACACCAAC	TACGACCCCT	CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

GAATTCGGCC	AAAGAGGCCT	AGTCATCTTC	AATATCTCTC	TCTCTCATCC	CTTCATTAAA	60
TCATTACCA	AGTTTGGACA	GTTTTCCTTT	GCAATGTGTC	TCCAAATGGT	CATCCTCTTC	120
TCCTTTTCA	GATTAGGATT	CTTGTTTCT	TTACTCATTG	GTAAAACAAG	TTTGGGAAAT	180
GCTAGTTACG	CAGTTAATGG	TGTAGTTACC	GCAGGACTTG	ACAAAACCTC	TAATGAAAGA	240
ATAAAACATT	TGCTATATTT	GTTTGATCAG	AGAACTTTT	TTCCATCTCA	GGGGATCATT	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:1105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 535 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

GAATTCGGCC	AAAGAGGCCT	ATAGGCCTCT	TTGGCCGTCT	AAATGAAATG	ATTGCACTGC	60
ACATACTTCT	AAAACTGTCC	TGCGATTGA	TAGCTTCCAT	TTCATGGCGC	TTCTTCTGGA	120
TGTCAGGCAC	TAAGTCGGGC	GCTTTATTCT	GTAGTTCTCC	TAGCAATCTG	GTGAGCTCCA	180
CTCTACAGAT	AAGGAAATCG	AGGCCAAGGA	CAGCTAAAGA	AGCGAGGTGC	GCAAGGTGCC	240
CAGGTCCGAA	GTGTTTCCGC	TGCTTTCAGA	CTGCAGTCCC	AGGGCTCAGG	AGTCCATGCT	300
TTCTGCGTAT	CTTCACGCTG	GCCACGGATC	ACCTCATCAT	TAGATGTGCA	AGTTGAACAA	360

GTGGTGTTCA CATTGCGACG TGTGTTAGGT AGAAGTGTGT GTGCACCTGC GTGTGCGTGT	420
ATGTTCCACA CGCTGATGCA GGAGGTATAC GCACAGATAT AATTGTCTTT TAGAAGATTG	480
ACTATCACTA ATTTTGAAAA ATTTCTGAA TGACCTTCC GNGCCGGCGC TCGAG	535

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

GAATTCGGCC NAAGAGGCCT AGAAAAAATT AAAAAGGGAT ACAGACGAGC TGCNAGCTAT	60
GGAACATAGA TATTAACCCC CAAAGAGTCN TAACCACAGC TGA CTCTTAG CTTCACAAGC	120
AGNCTCNGA ANGTTGGTAGC TTGTTTAAAG CAGAGGCCAT GCAGAACCCA TGAAACCAAA	180
GGACAGAGCC AGTAGGGCTG GAGTCTGACC AGAAAGTTCC ATGCCCTCTG CTTTCTGCAT	240
GGAAAATGAC CTGGTAGGTT TTAACCTATC CAAGACTACA GAGGATTTCA GAATTTAGT	300
TTGAGGTATG CCTCAAAACA TTCCAGCCTT GATCATGAAA GAAAGAAGTG ATCAAAATAC	360
CATATGTCAC AATGGAAGAAC CCAAGCGGCC CCAGAGCTCT TCTTCAGTAA TGAGATTTAG	420
TTGATCTGNA CAGTTATTTA TGCATTGAGG TCATATTTTG GCCAATCTTT TGCTTACAGC	480
TGTCGCCAAA TAAAGCCTTC TGTNTTAGCA TTTCTTTTAC CAAAATCAGG TTGAGAGATG	540
GTTCTTTGAG AGGACTGTTT TGTGAGGAA TACAGGGAAT CTCGAG	586

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

GAATTCGGCC AAAGAGGCCT AGGACTTAAA AGAACAGCTA GAAAAGATGA AAGGTGACTT	60
AGAAAGTAAA AATGAAGAAA TACTACATCT GAACCTAAAA TTGGACATGC AGAACAGCCA	120
GACTGCTGTC AGCCTCAGAG AACTTGAGGA AGAGAACACG AGCTTGAAGG TCATATATAC	180
CAGAAGTTCT GAGATTGAAG AGCTGAAAGC CACTATTGAA AATCTGCAAG AGAATCAGAA	240
ACGATTACAA AAGGAGAAAAG CAGAGGAAAT TGAACAACTC CATGAAGTCA TTGAGAAGCT	300
GCAGCAGGAG CTGTCCCTCA TGGGGCCTGT GGTGCACGAA GTCAGCGACA GTCAGGCTGG	360
CAGTCTGCAG AGCGAGCTGC TCTGCTCCA GGCCGGGGGC CCTCGTGGGC AGGCCCTACA	420
GGCGGAGCTC GAG	433

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

GAATTCGGCC	AAAGAGGCCT	ACGTGAATAT	TTTTCCATCT	GTGTTTCATTG	ATGTTAACAA	60
TAAAAATCTT	GTTTATGTGT	ATAAGCCTAA	CATATGCCTG	TGGGTCTTAT	AACTGCCTGT	120
TCAAACCTCAA	TGGGATACCA	AAAATGTATC	TGCTTACTTT	GGGGGTCTAA	CTTTAATTCTG	180
GTACATATAA	ACATCTCTGG	AAAAAAATGT	AGTTTTTTTC	TTCCCCCTGC	TGTTTTCCCC	240
AGGCTTTCTC	CTTTGACCTG	GCCACGGTTC	CCATAGACTA	CAAGACGACT	TAGAGACATT	300
GCTGTGACAT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

GAATTCGGCC	AAAGAGGCCT	ACTAACATTT	TCCTAATCTT	ATGTGTTTGG	CTCCTCTCAT	60
TTACTCCCCA	CAGCAGCCAC	ATGAAGTTGG	AATTTGGAAC	TCTTATTTAG	GTATGCAAAA	120
GGGTACCAGT	TCTCTTTAAG	GCTTTAGTTC	AGGAGTGGTG	TTAATGTATT	AATGTGTTGG	180
GGCGCGAGAG	GAAGGCGGTG	CTTATTTCTGA	ATCATGGTAG	GTAAAGATAA	TTTCAACTCT	240
GACACTTCCA	CTAATAAATT	TTCGCATCTA	GGGAAAATGA	CGTAAGCTTC	CTAGATCACA	300
GATTTGTTTT	CATCCAAAAC	CCGAAGTCTG	GTTTTGAAAT	CACGCTCTTG	ATACAAAGGT	360
GGCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:1110:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC	AAAGAGGCCT	ATCCGGGGGG	AGTAAGGTGA	GGACAAGGAA	CAGAAAGGCG	60
TGAGGTGATG	GAAGGAAGTC	CGGGAGAACC	ATATGAAGGA	GCAGGAGGAG	AGGAAGAAAC	120
TTTTTTTTCCT	TCTTTTCCAG	GAGTAGCTGG	AAATTAAGAT	CGGGTTCCTT	TTCTGCCAGC	180
TTGGAAGGGC	AACCCCATGA	CTGATTGCGA	TTCTGAGGAT	GTCTATGCAA	AGTTGGATTC	240
TTGTTACAGT	GTATCCAATC	TGAAGTATTG	CACATCTGAA	CTGGGACTGT	TAACACTGAT	300
GCCAATACAG	TGTGGGGTGC	CAGAAAGTGT	CTGCTGATAT	TTGTGGAAAA	AAAATCTATT	360
TTGTTTACCT	ACTGTATCAA	AGGGGAGGAA	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:1111:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 427 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

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GAATTCGGCC AAAGAGGCNT AGATTGTTTT CATTAGCAAA CTCATAATTA TCCTTTTCCT      60
TAACACTTCC AGTTGAGAAA ACAAGTATT GTTAATGACC AGTAATAATC TTGATCCAGG      120
GTAGGCAAAA TTTTCTTCC AGGGCCAGAT TGATACTTTA GGCTTTGCAG GCCACGGGGT      180
CTCTGGCAAC CCCAGCTCT GCTGTTGTAG CACAAAAGCA GCCACAGGCA CAAGTAAACA      240
CATGGGTGTG TCTCTGTACC AATAAACTT TATTTACAGA AACACAGGGC AGATGACTGT      300
CTGGCCCCTG GTCTTGTGAG CATTGTTGG TGGTGAACAA AAGAACTGT TCAGATCATT      360
ACATTTACAG TCATTACCAA AAATAGAATC TTCACAGTAG TTGTACTGTT GATGAAGCAA      420
GCTCGAG                                           427

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(2) INFORMATION FOR SEQ ID NO:1112:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 504 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

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GAATTCGGCC AAAGAGGCCT AGGTTATAAT AGCAGCTTAC TTTTGATAAG CGTACTAACT      60
GGTACATAGT AAATACATAC TGTGCATGCA TTATGTCATT TATATCCACA CAGTCACCTT      120
CAAATTCAGT ACAATTTGTA TTCCCGTTT ACAGATGAGA AAGCATATTT TGGTGAAGTC      180
AACCAAGGTT ACATGACTAG TAAATTTTAA ATGAGATTTA ATTCAGTAC TTACTAACCA      240
TTATGCATTG CTAAATTTGA ACATTACTTT AAAATATAAC TTCTAAAGTG TTCATATTAG      300
AAACCTATAA ATATACATAG ATTTGTCTCC TCTCTNACGA AGAACACATG AAGGAAAGAA      360
AGATATTAAT TTGGTGGCTT ATCATATGCC AGACATAGAT ATAGATGCTT GTATGTATGG      420
CATTTAATCC TTATCTGTGA GGTAGGTCTT TTTATGCCTT TCTATAGATT TAAATTAAAG      480
GTTTCAGTTA GTAAGTTGCT CGAG                                           504

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(2) INFORMATION FOR SEQ ID NO:1113:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

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GAATTCGGCC AAAGAGNNCT AGAGGGATAT AGAAACTTAA CAGCAGTGGC TGACATTTTT      60
GCTTATTTGT TAGGTATTGG TGGTGGTGTT AATCGGGTAC GCATATGCTT TCCTTAGGAT      120
TTGCATTTGC TGTCCCTGT GTCTAGAAGC CTATTCCTTA GATAAATCTT CATTCCTTAC      180
CTCCTTAAAA TGTTTCTCA TCTATCACCT TCTTAAGTCT GTACTGATCA CCCTACTTAA      240
AATTATAACT GCCCTCTTT GCTTGCACTT CTAAGCTTCC TTACCCTAGT CTGTTTAGCA      300
GTTACCTCCT TGAAACATGC TCTGTAGAAT TTACTTATTA TGACTATTGT CTCTCTTACT      360
ACCCTCGAG                                           369

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(2) INFORMATION FOR SEQ ID NO:1114:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 89 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

GAATTCGGCC AAAGAGGCCT AGTTAAAAAT AGAATTTGAG ATATTTAATT TTCTGCTCTT	60
TTTAAGTTAT GAAAACGTAT TTAACGAG	89

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

GAATTCGCCA AGAGCCTATT AATTTGTAAA CCTTAATATA GTGTAACTG AATAAAAGTA	60
AATAATTATT ATTAGAATGG TAACTAAGTC ATTAATTTT TTNGCAGAAC TGAACTTGT	120
ATGTTATTAG TTTATTTTCT TAGACCAAGT TAATAATGGA CTGTAAATAG AAAAATAAAT	180
GTCACTTTAC AGTTAGATGT ATCACAGTCG TTTCAGGAGA ATTTTTCCTA TATTGTTACC	240
TTGATTCAAT GTTTAAAATT GGTAGGATTT GTATAGATAT AGGATAGTGT TTTATTTATA	300
CTTTATCATA AGCCATAATC ATTTTAAGAA TACTTTATTG GATAGATTTT AGTACTTTTT	360
AAATTCTAAA GTTCTATTTT TCTTTTCACT TCCCCTTCT TCCCCTTATA AGATCATTTC	420
CATGTCTTTG TTGGTGATCT CAGCCCAGAA ATTACAACCTG AAGATATAAA AGCTGCTTTT	480
GCACCAAGTC TCGAG	495

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 522 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTCGGCC AAAGAGGCCT AGGGAAAAGA AGGGCTTTGG GGACCTGCCC ACTTCAAAAA	60
CAGTTTTTCT CATCCTTTGC CTTGGGCTCC AAACCCAGCT TGGTGTTTTT CTAAGGGAGC	120
TACAAATTCT GGAGCATCCC ATGAGGATGA TTTGCTGGCC TCGGTCATTA GGGGGAAAGG	180
ATGTTCTCAG AAAAACAGCC CTGCACGCTG GTCAGCAGAG ATCTTGAGGT CGTGGCCACG	240
ACTGGACTTG GTGCAGAGCT GAACCCGAGA CTCCAGCTGC TCGCTGAGTT CGTCCAGAGC	300
CCCGGTGCAG GACTCCAGGC TCTCGGCCAG TTTCTGAATC TTGGCCTTCA GCACGGCCTG	360
GCTAACCTTG GTGTCCCCCT CCGCCCGCCT GGGGATGAGG AAGCCACGTG AGCCAAAGAA	420
GACGATGAAG TAGACAGAAT TGTACAGGGC GATGGAGGCG TTCCTCCCGC ACTGCAGCAG	480
CTGGCGGTCC CCGCAGCCCT GCCAGCGGCA GAAAACTCG AG	522

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAATTCGGCC	AAAGAGGCCT	AAAAATATTT	TACTTGTTC	ATCCACAGTT	CTCTACAGAA	60
AGAACCAATG	AACCCAATAG	GAACAAATTC	TCTGTGGAAA	ACAAAGCATA	GCTGTAGTAG	120
ATACGAATCC	AATCACAGAG	GAAACAGGAA	GAGAAAAACA	TCCAAGACTA	TAGTGAAAAC	180
TGGAAATGGT	CTGTTTTCGT	GATATTCGTA	TGATTAAGAT	GCAAATTTTT	TCTTAGGAAA	240
ATGTGATTGT	TAAC TAGCAT	TCTGTTTAC	ATGTTGACAT	TTCTAACACA	CACACCACTG	300
ATTTGAACCT	CAA AATTAT	TTTCTGATTA	TATATGCTAG	GTCATGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

GAATTCGGCC	AAAGAGGCCT	AGTGCCCACT	CATTTATGTA	CTGTCTATAG	CTATTTTCAT	60
GCTACAATGG	CAAAGCTAAG	TAACACTCAA	GGCCTAAAAT	ATTCACTATA	TGCCCTTTGA	120
AGAAAAAGTT	CACTCAACTC	TGCCCTAAAC	TACAGACCCT	GGCCAAGGTG	GGAGGATCAC	180
TTGAGGCTAG	TAGTTCAAGA	CCAACCTGAC	TCTGTCTCTG	ACTCTGTCTC	TACCAAAAAA	240
AATTAGCTGG	GCGTTGGGCT	TATCCCTGTA	ATCCCAGCTA	CTCAGGAGTC	TGAGGCAAGA	300
GGATCACTTG	AGCCCAGAAG	TTCAAGGACA	CAGTGAGCTA	TGATTGCACC	ACTATACCCC	360
AGCCTGGGCA	ACAGACCAAG	ACCCTGTCTC	TAAAAACATA	AAATAAAAAA	TAAAAAATAA	420
AAATAAATAA	TAAAGAAAAA	AGAAACAGAA	TTAAAGAAAT	TCTTTTGCTC	AAAGTCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCGGCC	AAAGAGGCCT	AAGTTGTGTC	AGTGTCTCTC	CTAAGGTAGT	AAATATAATT	60
GACTTATTCT	GAACCCATTC	TATTTTGAAT	CTCCCCTTTC	CTCTCACAAT	ACTTGAACAT	120
TTTAATCTTT	TGGAATATTG	TCTTTCTTTG	TTATAACTAT	TCATTTT TAG	CTTTTGTCTC	180
CAGTGCATGA	TCTCATATTT	TGCTTTTAT	TTTAGTATA	AGAACATTTA	TAAAATCATA	240
TTTTTGT TAC	TGCAATTGTT	TTATTTGTTG	TGTGGCAAAT	GAGAAATCCT	TTATTTATTG	300
TGCTGTATCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```
GAATTCGGCC TTCATGGCCT ACCAGATACT GTTTTTTTAA TACATATTCA AAAGAAAGCT      60
ATTAACCCCTG ACAGACATTT CTCAGTCTGT GCTTTTTTCT ATTTTATCAT TTTAAAGTAC      120
TTAAGATAGA AAGATGAAAA AGCATTGTGT GGCTACTTGG TTAGCTTCAC AAATTTTCCC      180
CCTTCCTACG CAGCTCGAG                                     199
```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```
GAATTCGGCC TTCATGGCCT AGTAGCATAT TAACAGTGTA ATAAAAATA AAAACAAACT      60
CTAGTATCCA GAGGATCACA TGCTGACCAG ACCCTGTGTA GAAAGTGCCG AAGAGCATCA      120
AGGAAATGGA AACGTTGGAA TTCCATCCGT GCTTGTGGCT TTCCTTAAAC TTTTGTTATG      180
GAAAATTTCA AATATACCCC GAAGTGGAGA TTGGCTTAAA TCAGCCCCAC GTGCCCATCA      240
CTCGGCTCCA GTCATTATCC AGTGTGGTTC CTCTGATCTT CACCACCCCC TCGAG          295
```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

```
GAATTCGGCC TTCATGGCCT AACGGAAGCG TCTCCTCATT GATGGAGATG GTGCTGGAGA      60
TGATCGGAGA ATTAATCTGC TAGTGAAGAG TTTTATTAAA TGGTGCAACT CTGGGTCCCA      120
GGAAGAGGGA TATAGCCAGT ACCAACGTAT GCTGAGCACG CTGTCTCAAT GTGAATTTTC      180
AATGGGCAAA ACTTTACTAG TATATGATAT GAATCTCAGA GAAATGGAAA ATTATGAAAA      240
AATTTACAAG GAAATAGAAT GTAGCATAGC TGGAGCACAT GAAAAAATTG CTGAGTGCAA      300
AAAGCAAATT CTTCAAGCAA AACGAATACG AAAAAATCGC CAAGAATATG ATGCTTTGGC      360
AAAAGTGATT CAGCACCATC CAGACAGGCA TGAGACACAG GGAACTCGAG          410
```

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

```
GAATTCGGCC AAAGAGGCCT ACCTTTCTTT CCTCCCTTCC TCCTCCCATG TCCCTCTCTC      60
```



```

CTCCCTCCCA CCTCTCACCC TTCTCCATCC CTCCTCCCTC TTTTCTTTTG TACTTTCCAG      120
CTGGAGCAGC AGCAGCAGCT GGGCCTGAAT CAATGATTGA CTTCCCCACG ACCTCCCCTT      180
CTCTTTTGCC AATGATATCT CTTTGCCCTT CCAGTCATCT TTTAATTTTA TCGTGTATGG      240
TTTTGCTTCT CCTTCTCCT CCTCCTCTCT TCCCTCTTTC TCCCCCTCT CCCCCACCGA      300
CAGTCGAG                                     308

```

(2) INFORMATION FOR SEQ ID NO:1124:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

```

GAATTCGGCC TTCATGGCCT ACAATTTTGC CATGGTTCTG CTCATTTTTT CTGCAATTCT      60
CAGCATGGAT TTATATCGAC GCGAGGACAG GAGACTGGAT ATTTTCTGCT GTTTTACAAG      120
CCCCTGCGTC AGCAGAGTGA TTCAGGTTGA ACCTCAGGCC TACACCGACA CACACGACAA      180
TACCCGCTAC AGCCCCCAC CTCCCTACAG CAGCCACAGC TTTGCCCATG AAACGCAGAT      240
TACCATGCAG TCCACTGTCC AGCTCCGCAC GGAGTACGAC CCCCACACGC ACGTGTACTA      300
CACCACCGCT GAGCCGCGCT CCGAGATCTC TGTGCAGCCC GTCACCGTGA CACAGGACAC      360
CCTCAGCTGC CAGAGCCCAG AGAGCACCAG CTCCACAAGG GACCTGCTCT CCCAGTTCTC      420
CGACTCCAGC CTCCACTGCC TCGAG                                     445

```

(2) INFORMATION FOR SEQ ID NO:1125:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTGCCTT CATGGCCTAC ACCAGCCTAT TCTCTGCTTC TGTGAGTTTG ACTCTTTTTT      60
TTTTTATGAG ACAGAGTCTC ACTCTATCTC CCAGGCTGGA GTGCAGTGGC ACAATCTCGG      120
CTCACTGCAA CCACCACCTC CCAGGTTCAA GCAGTTCTCC TGCCTCAGCC TCCCAGTAG      180
CTGGAAATAT AGGTGTGCC CACCAGACT GGCTAATTTT TGTATTTTTA GTAGAGACAG      240
GGTTTCACCA TGTTGGCCAG GCTGGTCTCG AACTCCAGGC CTCATGTAAT CCGCCACCT      300
TGGCCACACT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:1126:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC TTCATGGCCT ACACGCCCCC GCCCCGCTG CTGCCCAGGA ATACTTTCTC      60

```

```

CAGGAAGGCT TTCAAGCTGA AGAAGCCCTC CAAATACTGC AGCTGGAAAT GTGCTGCCCT 120
CTCCGCCATT GCCGCGGCC TCCTCTTGGC TATTTTGCTG GCGTATTCA TAGCAATGCA 180
TCTGCTCGGA CTCAATTGGC AACTCCAGCC TGCAGATGGG CACACCTTTA ACAATGGGAT 240
AAGGACCGGC TTACCAGGAA ACGATGATGT GGCAACAATG CCATCTGGAG GCAAAGTGCC 300
CTGGTCGTTG AAAAACAGGC AACTCGAG 328

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC TTCATGGCCT AGTGAGGCTC CATTATTTTC ATTTTAAACA AGTTTCAAAA 60
TGTGGCTGCT GCTGTTGCTG GTGGTCCGGA GCCTGCAGAC AGGGGGATTT GCCTGGGAAG 120
GAGAAGTAGA AAACAACGTG TACAGCCAGG CTACAGGGGT GGTCCCCCAG CACAAGTATC 180
ACCCACAGC AGGCAGCTAT CAGCTTCAAT TTGCCCTGCA GCAACTTGAA CAACAAAAAC 240
TTCAGTCCCG GCAGCTCCTG GACCAGAGTC GAGCCCGGCA CCAGGCAATC TTTGGCAGCC 300
AGACACTACC TAACTCCAAT TTATGGACAA TGAATAATGG TGCAGGTTGT AGAATTTCCA 360
GTGCCACAGC TAGTGGCCAG AAGCCAACCA CTCTGCCACA AAAAGTGGTA CCACCTCCAA 420
GTTCTTGCGC CTCCTGGTT CCCAAACCCC CACCGCTCGA G 461

```

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GAATTCGGCC TTCATGGCCT AGAATTATCA TGGCATCTGT AACACACATG CCTGTGCTAT 60
ATTCTCACAA TTTTGTTTCTG GTTGTGCATA TTAAAATATG GAGCTCCATA TTTTTCCT 120
TCCTAGTTGA TCACAGTTGA CTGGGTTGTC TTTTCTGTCA CCTGTTAGTT TTGAAGAGAT 180
GTCTCATATG TAGTGATGTT AGGTATGATG CATTGAGCCA TAGTAAATAC CTGGTACTGT 240
CTCTCAAAAA AAGCCTTTAG CTTTTTTGTA AAGAGGACAA CAGAAAACAC ACCAAAAAAG 300
CAGAAAAATA TGTGTCGGTG ATAGTGGGAG AAATTATATA ATCATGGTCA TATGTTACCC 360
CAGAGAAGGC TTACACAAGG TCAGCTACAG TTTACCCAAT AACGCTGTGA TTGTCTGGTT 420
CCTTGGCTTA GAAAGCTTAG TCTCTGCCAA GCGGCCTCGA G 461

```

(2) INFORMATION FOR SEQ ID NO:1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

GAATTCGGCC	TTCATGGCCT	ACAAGAATGA	AGCACTGAAA	AGCGAAGAAG	GCTGCATTCC	60
GAATATCGCC	CCAGACATCT	GCATAGCATA	CAAACTGCAC	CTAGAGTGTA	GCAGGCTCAT	120
CAACCTCGTG	GACTGGTCAG	AGGCTTTTGC	AACAGTTGTG	ACAGCTGCTG	AAAAAATGGA	180
TGCAAATTCT	GCAACCTCAG	AAGAAATGAA	TGAAATTATC	CATGCTCGGT	TTATTAGAGC	240
TGTTTCTGAA	CTAGAACTTT	TAGGATTTAT	AAAACTTACC	AAACAGAAGA	CTGACCATGT	300
GGCAAGACTA	ACATGGGGAG	GCTGCTAGAA	AGCAAATAAG	CAAAGCCAGA	ACTATCACAT	360
TTAGCTTAAG	AGAAAAAGGT	GACCAGTCAT	ATTTACATAT	ATTAGAGGAG	CCTGTTTGT	420
TGAGAAGATA	AATGTGTAAC	CCCCATTGAT	GTTTAACCAG	AAAAGTACAT	TGCTAACCCC	480
AAGAGCTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:1130:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

GAATTCGGCC	TTCATGGCCT	AGGGCAACAG	GAAACTCTTT	ATTATGGTGA	TGAGATCGAC	60
AATCTCCCCT	ACTGTTAACC	TTCGCTCCTG	CACACTTCAG	TGTCCTCACT	CTGTAGGGCT	120
CGCTGGCCTG	GGCTTCTGCG	ACCCGCGATC	GTCCAGGAGA	GGGCACTCGG	CGCCCTTCCT	180
GGGGCGCTTC	TGGGGCGGAA	TTTGCTAGGC	CGCCGTAGCA	GCGGTGCCAG	GTGAGAAGCC	240
GAGCCGGCCC	GCTTTTCGTT	CTTTAATTGG	ACTCTTGGCT	AAGACGCTAC	CGACACCCCC	300
TCAGGTGGTG	GAGGAAGAAG	GACAACAGGG	AGAGGTCGAG	GGCCGAGACG	GCCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 295 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

GAATTCGGCC	TTCATGGCCT	AAACATCCTC	CTGCCACTTA	GGAGGAAACA	CCTCCCTATG	60
GTACCATTTA	TGTTTCTCAG	AACCAGCAGA	ATCAGTGCCT	AGCCTGTGCC	CAGCAAATAG	120
TTGGCACTCA	ATAAAGATTT	GCAGAATTTA	ATACAGATCT	TTTCAGCTGT	TCTTAGGGCA	180
TTATAAATGG	AAATCATAAC	GTGGTTCTAG	GTTTCAAAC	CATGGAGTGA	TGTGGAGCTA	240
GGATTGTGAG	TGACCTGCAG	GCCATTATCA	GTGCCTCATC	TGTGCAGACC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 500 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

GAATTCGGCC	TTCATGGCCT	AATGAAAAAC	AAAACAAAGA	TGATGAAGCA	GAGTGGCAAG	60
AATTACAACA	AAGCATACAG	CGAAAAGAGA	GAGCTCTATT	GGAAACCAAA	TCAAAAATAA	120
CACATCCTGT	GTATAGCCTT	TACTTTCCTG	AGGTAGAGCT	GAAGTTTCCT	GCACCAGGCA	180
AGCCTGGAAA	TTATCAGTAT	ACTGTGTTTC	TGAGATCAGA	CTCCTATATG	GGTTTGGATC	240
AGATTAAACC	ATTGAAGTTG	GAAGTTCATG	AGGCTAAGCC	TGTGCCAGAA	AATCACCCAC	300
AGTGGGATAC	AGCAATAGAG	GGGGATGAAG	ACCAGGAGGA	CAGTGAGGGC	TTTGAAGATA	360
GCTTTGAGGA	AGAAGAGGAG	GAAGAAGAAG	ATGATGACTA	AGCAGTACTC	TGAATGGACC	420
ACAGTGTTTG	CACATATTTG	CAATTTTTTG	CTGTTTTTGA	AGTGTATCAT	AAACCAGAAA	480
CAGTACATAA	CAATCTCGAG					500

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

GAATTCGGCC	TTCATGGCCT	AGATTATATT	GCATATATTT	TATAGAACAA	GGCAAGCAAA	60
ATATTTTAGT	ATTGCAAAT	CATGTTACTA	TAATTATTAG	ATCATAGTAC	CATTTATATA	120
AAGTATTAGG	TTGGTGCAA	AGTAATTGCG	GTTTTGGACC	GTGAATTTTA	AATCATTATA	180
AGTCGGCTCA	GACACGTCTT	TATTAATCAG	AGCAGGAAGC	ATTATAATCA	ACACATTTTT	240
GCCAATGAGA	AATAAGTTTG	TTCATTCCTG	TAGCTTAAAA	ATTCATGCTT	TGGGATTTGG	300
AAAGCATTTT	CTGCTTTCCA	AAAACCTGCT	GGTTTTGGAA	GCATTTTCCT	TTCAAATAGT	360
TGTCGAGATG	CTTGAAGAAG	TGGTGGTTGA	CAAGAGGTCA	GGTGAATACG	GCGGCTCGAG	420

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC	TTCATGGCCT	AACTAGTCCT	GACTGCTTAG	ACAAAGTCAT	AGATTATGTT	60
CCAGGCATTT	TCCNAGAAAA	CAGTTTTACA	ATCCAATACA	TTCTGGACAC	CAGTGATAAG	120
CTGAGTACTG	AGCTCTTTCA	GGACAAAAGT	GAAGAGGCTT	CCCTTGACCT	CGTGTGTTGAG	180
CTGGTGAACC	AGTTGCAGTA	CCCACTCAC	CAAGAGAACG	GAATTGAAAT	TTGCATGGAC	240
TTTCTGCAAG	GCACTTGAT	TTATGGCAGG	GATTGTTTGA	AGCACCACAC	TGTCTTGCCA	300
TATCATTGGC	AGATCAAAAAG	AACAAC TAGC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC	TTCATGGCCT	AGCAATTTT	CCCTCAGGGG	GGCTCCCATC	TTCTTACACA	60
GAGAGGCAGC	TGAGGCAGGA	CAGTGGGGCT	AACTGTAGAC	CAGGCGAGGG	CACGGGCTGC	120
TGGGGTGGCC	CTGCTTCCCC	AGTGTACATA	TTGTATCTGT	GTAACATTTT	GTATATTCCA	180
GGGGTAGGGC	CGCCCCCTGT	ATCATACCTA	GCAGAGGTTG	GAGCTGGCAC	ATGGGGAGGA	240
GTTTCTAATA	ATTATTTGGG	GCTGGGAAAC	TTATTTATTG	ATAGCATAGG	ACAGAGCCCA	300
CTCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC	TTCATGGCCT	ACCGAGGCTT	CAGCGGGTGC	CGCCCGCCTA	GAGGGAGTGG	60
AGCGGCTAGA	CAGCTTTAGG	AACTGAAAGG	TTCACGAGGC	TGTAACGAAG	AGTCGAGTTG	120
CTCCAGAGAG	CCTACGACTA	GATTTGCATC	TTTACGTCTT	GCGCGGAGGC	TGCTACACAC	180
ATGCAGAAGT	CATGCTGGTG	GCCTGGACAG	TGAAGGGAGA	GAAGTGGATT	TGGGAGACAT	240
TTAGGAGGAA	CAGTAAGAGG	ACCTTGTGCA	TGAATAATTT	GTTTCCACAC	TACAGAGTGG	300
GTAATAAGCA	GATTAGTAAA	AACAATTCTG	CTTCACTTCA	ATAACAGCCT	CCTCCAATC	360
ATTTTTTCTC	AACAACTTA	TTTTCCAGCA	GAAGAATCCC	AGACTTCTTA	GAGAACCCAG	420
TGACTTTTTG	CACCTTAAAT	CTGTGAAATC	CTCATGTTTT	CTTCTGCCGT	ATCCATAGTT	480
CAAACAAGAA	CCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

GAATTCGGCC	TTCATGGCCT	ACAATTGTAT	GCTGAAAAAT	GGGAGTAACT	ACATGAAATG	60
AGCAAATGCC	TAGAAACAAA	AAACCTACGA	AGATTGTATC	ATGAAGAAAT	AGAAAATATG	120
AATAGACGTG	TGTATTAGTC	TGTTCTCACA	CTGCTAATAA	AGACGTACCC	AAGACTGGGT	180
AATTTTTTTG	TTTTTAAGAA	AAAAGAGGTT	TAATGGACTC	ACAGTTCCAC	GTGGATGGGG	240
AGGCCTTATA	ATCATGGCAG	AAGGCAAACA	GCACGTCTTA	CATGGCAGCA	GGCAAGAGAG	300
AATACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC	TTCATGGCCT	AAGCAAATCA	CTTTTCCCGA	TTGAAAATAC	ACTTTACAAA	60
AGTGTTTTCA	GCTTTTGCAT	TGGTTAGGAC	TATACGGTAT	CTTTACAGAC	GGCTACAGCG	120
GATGTTAGGT	TTAAGAAGAG	GCTCTGAGAA	TGAAGACCTC	TGGGCAGAGA	GTGAAGGAAC	180
TGTGGCATGC	CTTGGTGCTG	AGGACCGAGC	AGCTACCTCA	GCAAAATCTT	GGCCAATATT	240
CTTGTTCTTG	GCTGTTATCC	TTGGTGGTCC	TTACCTCATT	TGGAAACTAT	TGTCTACTCA	300
CAGTGATGAA	GTAACAGACA	GCATCAACTG	GGCAAGTGGT	GAGGATGACC	ATGTAGTTGC	360
CAGAGCAGAA	TATGATTTTG	CTGCCGTATC	TGAAGAAGAA	ATTTCTTTCC	GGGCTGGTGA	420
TATGCTGAAC	TTAGCTCTCA	AAGAACAACA	ACCCAAAGCA	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC	TTCATGGCCT	AATTTTTTTT	AATAGAGACG	AGGTCTTGCT	ATGTTGCCCC	60
GGCTGGTCCC	AACTCCTGG	CCTCAAGCAG	TCCTTCCACC	TTGGCCTCCC	AAAGTGCTGG	120
GATTATCAAT	ATGAGCCACC	ATGCCAGATT	TGTTTCATTTT	TAAATATTTT	TATCTCTTCA	180
AGTCATCTTT	TGATCTTTTA	AAAAGCACCT	TCAAACAGCT	GCACCTTCCA	TTTGCAC TAG	240
GAAATGAAGG	TAGTGATGGG	ATTGGCAATG	TTCTTGGCAG	ATGTTTCAGC	CCAAAAGCTC	300
TTCTACAGAC	CGGTTTAGAG	CTGGTGCCCT	ATGAGAATAT	TAGGGAGCTT	TTATTTTAAA	360
TTGAACTTTA	CCCTTGTTCA	TGCAAGGCAT	TCCTCCTGAA	TGCATCCATG	AATTTGTTTA	420
CTTTTGCGTC	AAACATATGA	GCCATTGTCA	TGCTCAGCAT	GTGCCACCTC	GAG	473

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC	TTCATGGCCT	AAATGAAGAT	CAGCTTCGTG	CAAAGGGTTA	TGACAAAACA	60
CCAGACTTCA	TTTACAAGT	ACCA GTTGCT	G TAGAAGGGC	ACATAATTCA	CTGGATTGAA	120
AGCAAAGCCT	CATTTGGTGA	TGAATGTAGC	CACCACGCCT	ACCTGCATGA	CCAGTTCTGG	180
AGCTACTGGA	ATAGGGTCCC	AATATAACAG	ACAAATGGTG	AAACAGAGGG	ATACTCACTA	240
GGAAACAGAT	TTGGGCCAGG	CTTAGTCATC	TATTGGTATG	GATTTATCCA	GGAGCTGGAC	300
TGCAACCGGG	AAAGGGGCAT	CCTGCTCAAA	GCCTGTTTCC	CCACGTCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC	TTCATGGNCT	ACCAATTTCT	CATGGTTCCC	TAGGACCTTC	CTAGCTCCCC	60
AGGGAAAGCC	TNTGCTGTTT	CCCTGNNTT	CTTTTCACTT	GACAAACTCC	TACTCAAAC	120
TCAAAACCCA	ACTCAGGAAA	CATCTCCCCT	AGGAAGCTCT	CCTTAACTTT	TTCTGCTGGG	180
TCCCGCTGCC	TCTGCTAAAG	TCCACGTGAG	GGACTGCCAA	GANGTTTGCT	CTGTCTCACA	240
GATTGAGTGC	CAAGAGGGCA	GGGACNTCTC	TTTGAGAGAG	TTTAACCTCT	GTAACATAAG	300
CAAGTTTACT	TAATCACTGA	TTAAACCACT	TTGTGCCTCA	GTTTCCCCAT	TTGTTAAGCA	360
TGAATTATCA	CTGTCACTAT	CTGCCAGGAC	TGTGAAGGGG	GTGTAAATGC	ATGAACATCA	420
TAAAGTGCTT	AGAAGCATGC	CTGGTACAAA	GAAAGTTCTC	TAGGNAAACA	ANAAACAAAC	480
AAAAAAAAC	AAAACAGAAA	TGTATCTAGA	GGTCAGATAC	CAGTCCCACA	TCGAGTGCAG	540
ATAATGGGCT	AAGTAACCAA	TGAGTCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC	TTCATGGCCT	AGTAAGGAGA	GCCTCTATCA	AAGGGTGGCC	TGGAGCAGAA	60
TATCAGGCTA	TGTGTATTAG	TTGTTTTC	CACGCTATGA	AGAACTACCT	GAGACTGGGT	120
AATTTATAAA	GAAAAGAGGT	TTGATTAAC	CAGAGTTCCC	ATGACTGGGG	AGGCCTCAGG	180
AAACTTACAA	TCATGGTGGA	AGGCATGATA	GCAGGAGGGG	TGGAAAGAGG	GGAGTGTCAC	240
ACTTTAAAC	CATCAGATCT	TGTGAGAACT	CACTCACTAT	CATGAGAATA	GCAAGGGAGA	300
AATCCACCAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC	TTCATGGCCT	ACTCAAGCGT	TTCAGTGTGC	GATATCTGCG	ACTGCTCGCA	60
GTCTTGCTT	CCTTGTTCT	CCCCTGGGGG	CTCAGGATTA	CGAGGCCTGA	AGCTCCTAGA	120
GGCTAAATGC	CAGGGGGATG	GAGTGAGCTA	CGAGGAAACC	ACTATTCCCC	GACCCAGCGC	180
CTACCACAAT	CTGTTGGAT	TACCACTGAT	TAATCGTCNA	GATGCTGAGG	TGGTACTGAC	240
GAGTCGTGAG	CTTGACAGCC	TGGCCTTGAA	CCAGTCCACG	GGGCTGCCTA	CCCTTACTCT	300
ACCCCGAGGA	ACGACCTGCT	TACCCCTGTC	CTTACTCCCT	TACCTGGAAC	AGTTCCGGCG	360
GATTGTATTC	TGGTTGGGGG	ATGACCTTCG	GTCTGGGAA	GCCGCCAAGT	TGTTTGCACG	420
AAAAGTGAGC	CCCAAAGTCG	AG				442

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC	TTCATGGCCT	ACCATCTACA	GCTGTATTCT	TGTTCCCTTG	ATGGCACAAT	60
TAAACTGTGG	GACTATATAG	ATGGCATCTT	AATAAAGACT	TTCATAGTTG	GATGTAAACT	120
TCATGCCCTC	TTTACTCTTG	CCCAAGCTGA	GGATTCTGTC	TTTGTATAG	TGAATAAAGA	180
AAAACCAGAT	ATATTTCAGC	TGGTTTCAGT	GAAACTGCCA	AAATCCTCAA	GCCAGGAAGT	240
AGAAGCCAAG	GAGCTGTCCT	TTGTTTTGGA	TTACATAAAC	CAGTCACCCA	AGTGCATTGC	300
CTTTGGAAAC	GAGGGAGTAT	ATGTTGCGCA	GTACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC	TTCATGGCCT	AGGCCAGGGG	ACCCGGCCTC	AGGTCTGTGG	AGGTGCTTCA	60
ACAGCAGCAT	GCTCATTCTC	TGTCCGTAGT	GTCTCCATAT	ACTTTCTCAT	CTTCTCCACC	120
ATCCAGGAGG	GTAGGACAAA	GGATTTCAT	TCCTCTAGCT	TCAGATCCAG	GCATCCTCTG	180
TAATCATCAC	TGGCCGCAAG	GTCCCGGATG	TCCTCCTCGA	TGAGGAGGTA	GGCCATCTTG	240
CCCCCTGTTG	CCCGCATGTG	ATGCTGCTCA	GCCAGCCAGT	GCTTATCCTG	GGGGTCAGCT	300
GCATACTTAA	AGAGGTGTGG	GTGCTTGATG	TAGATTCTTC	CTCTGGTGCC	CCCCATCCCC	360
AGGGCTTTGT	TGGCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

GAATTCGGCC	TTCATGGCCT	AGGAAAGCTG	GGGGCAAGGA	AGAGCCTTGA	ATCTTGAGGT	60
GGGACGTTGA	CTCTAAGATG	TCCTTGAGCA	GTGGAGCCTC	CGGAGGGAAA	GGAGTGGATG	120
CAAACCCGGT	TGAGACATAC	GACAGTGGGG	ATGAATGGGA	CATTGGAGTA	GGGAATCTCA	180
TCATTGACCT	GGACGCCGAT	CTGGAAAAGG	ACCAGCAGAA	ACTGGAAATG	TCAGGCTCAA	240
AGGAGGTGGG	GATACCGGCT	CCCAATGCTG	TGGCCACACT	ACCAGACAAC	ATCAAGTTTG	300
TGACCCAGT	GCCAGGTCCT	CAAGGAAAGG	AAGGGCTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GAATTCGGCC	TTCATGGCCT	AGGGGGGGCC	ATCTTTAATT	CTGTAAGTTC	ATGGTAAAGG	60
TATCTCCCCC	CACACTGGGG	CAGGCGGCGG	AATAAGCTCC	AGCGTTCATG	CGCCACTCAC	120
AGGACTGCTT	ACCCCCACTG	CACTTACAAT	GCAGTCACAG	AGTTACGGCA	TGTTACCCGG	180
TGTCCATGAC	AAGCAACACC	AAGTATAAAT	AACAGAATA	CAGCAGAGCA	AACTAAGATA	240
AATATGTTTT	TGCATCGTCC	TCCACATAGT	TTCCTTTTAA	AAAGAAGAGT	CACATCCAGG	300
GGTCTATCCC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GAATTCGGCC	TTCATGGCCT	AGCTCTTGG	GGAGCTGTTT	CAGAGGGAAA	GTGGATGAAG	60
GCTGAAGTGG	AGGCCAAATT	AGGTGCTCTA	GTACCCTCTC	TTGGATCTCT	TTCAGCTTTT	120
ACCTGTTTTA	TATGCTGGGA	TTTTATATAC	AACTATTTGC	AGAACTCAAC	TGCTAAAGTA	180
AAACGGTGGG	GAGGACTATT	GGATTGGGAG	ATCTCTAAAA	TCCCATTTGGG	ATTGATGAAA	240
AAGAGAACTA	TCAGCAGAAA	AGAGGAAGGG	AACAAATGAG	TTGTTAGTAC	CTTAGTTCTT	300
AATTTATGTT	CCTTTATTGT	AGATTCTTTT	CTTGGCCACT	ACACTCCTTA	GAAATATAAT	360
TCAACACTGT	TTCTTTTACC	ATTTTGTATG	ATATGCAAAG	TCCAGCTTTA	CTCAGCCACA	420
TTTTGTCCAC	TGGCTTATAT	TTAATTTATA	TTTTAGGATA	CAGATAACTC	GAG	473

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGTC	TTCATGGCCT	ACTCTGGGTT	GCCTGTGGTC	ACTTCTGGTT	GCCTAGGACT	60
AGAAGGCTCA	GATTTTCAGT	GTCGGGACAC	TCCCATTCCT	CATCAAAGAA	GATCAATTGA	120
ATGCTGCACA	GAAAGGAACG	AATGTAATAA	AGACCTACAC	CCTACACTGC	CTCCATTGAA	180
AAACAGAGAT	TTTGTGTATG	GACCTATACA	CCACAGGGCT	TACTTTATAT	CTGTGACTGT	240
CTGTAGTTTG	CTCTTGGTCC	TTATCATATT	ATTTTGTTTT	TTCCGGTATA	AAAGACAAGA	300
AACCAGACAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GCCACGAAAG GTACCCCTGA ATTCTGGACT CATAAAATCT CTTAGATAAT ACATATTTGT	60
TGTTTTTAACC CACTCAGTTT TGCATTGGTT ACACAGCAAT AGAAAATAAA GGAGGCAGAT	120
GAAATTGATG GAGAACAATT GCAACGAAAA CAGAATACAC AATGCACGAG CCTGTGTCAG	180
GAATGACAGT GCATTCCACG GAAGAGTTGC ACAGAGAGAG ACGCCGCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC TTCATGGCCT AGCCTTTAAC ACTTGATATA AAATCCAAGC ATTTTTCAGA	60
CCTCAACCCA GAATAGTAGA TACCTGAAAT TAAGATTCCT ATTGGTGAGA AACAAAGATCT	120
GTATATTTCC CTATCCCTAT CCCCAAATGC CAGTGGGTCA TTTTCCCCAT GCCTAGCTCC	180
ATTCACAGCT AATATGTGGA TTGAGGCTTT ATTCCAAAAC ATTTAGGTTC TATATTCTTC	240
CCTAGCCCTG ATTAGCAGTG CTCATCTTTG AAGATCATTG TGACTTTTCA GACTATTGTA	300
GTGATGGCTC AACCTGACCC CTTCTCCTCC TTTCAGGATT TGGCAGAGAG AACGGCCGCT	360
TCTCGAG	367

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC TTCATGGACA GCACAGTGGC CAAAGAAGGC ACTAATGTAC CATTAGTTGC	60
TGCTGGTCCT TGTGATGATG AAGGCATTGT GACTAGCACA GGCGCNAAAG AGGAAGACGA	120
GGAAGGGGAG GATGTTGTGA CTAGTACTGG AAGAGGAAAT GAAATTGGGC ATGCTTCAAC	180
TTGTACAGGG TTAGGAGAAG AAAGTGAAGG GGTCTTGATT TGTGAAAGTG CAGAAGGGGA	240
CAGTCAGATT GGTACTGTGG TAGAGCATGT GGAAGCTGAG GCTGGAGCTG CCATCATGAA	300
TGCAAATGAA AATAATGTTG ACAGCATGAG TGGCACAGAG AAAGGAAGTA AAGACACAGA	360
TATCTGCTCC AGTGCNAAAG GGAGTCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC	AAAGAGGCCT	AGCACTTGTC	TCATTTTAAT	GTAAAGATT	GCTTCCATT	60
TCCTACAGGC	AGTCTCTCTC	TTCTCACAG	TCCCACTGTG	CAGGTGCTAT	TGTTACTCTT	120
ACGAATATTT	TCAGTAATGT	TATTTTCTTC	TAAGTGAAAT	TTCTAGCCTG	CACTTTGATG	180
TCATGTGTTC	CCTTTGTCTT	TCAAACCTCA	AGGTTCCCCT	GTGGNCCTCT	CCCTTACCCT	240
GGGAAGGCCT	CTTGGAGACC	TTACCCCTTG	CTGTTTGGAC	TTTGTATACT	TTAAATAATT	300
TAACTACCCT	TAATTACTTA	AAAAAAAAAA	AAAAAGCTT	TATGATTTTC	ATAACTTATT	360
GCTGATTTTA	ATGGATTGTT	AATTCAGTC	CTGTAGTTTT	ATTTTATGTT	TAGATAGGGC	420
TGGGCAAGGA	AAAAGAAAAT	AAAGACAACC	ATACTCGAG			459

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC	AAAGAGGCCT	ACTCCTTCAG	ACTACAAGCT	CCACAGAGCC	GCGGGAGGAC	60
GGTTGCCTGG	TATTATTAGC	AAGCAGCAAA	TATGGCGGTG	GCGCGCGTGG	ACGCGGCTTT	120
GCCTCCCGGA	GAAGGATCAG	TGGTCAATTG	GTCAGGACAG	GGACTACAGA	AATTAGGTCC	180
AAATTTACCC	TGTGAAGCTG	ATATTACAC	TTTGATTCTG	GATAAAAATC	AGATTATTAA	240
ATTGGAATAA	CTGGAGAAAT	GCAAACGATT	AATACAGTTA	TCAGTAGCTA	ATAATCGGCT	300
GGTTCGGATG	ATGGGTGTGG	CCAAGCTGAC	GTTGCTTCGT	GTATTAAATT	TGCCTCATAA	360
TAGCATTGGC	TGTGTGAAG	GGCTCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC	AAAGAGGCCT	ACGAATGTGG	CCGGGTGGGA	CCCGGACATA	CGAGAGATTG	60
TCCTCATCGT	GGCCATGATG	ACATTGTCAA	CTTCGAGAGG	CAGGAGCAGG	AGGGAGAGCA	120
GTACCGTTCC	CAGAGGGACC	CACTGGAGGG	CAAGCGGGAC	CGGAGCAAGG	CCAGGTCTCC	180
GTAATCGCCA	GCCGAGGAGG	ATGCCTTGTT	TATGGATTTA	CCCACTGGCC	CAAGAGGCCA	240
GCAGGCACAG	CCCCAACGGG	CAGAGAAGAA	TGGAATGCTG	CCTGCCTCAT	ATGGCCCAGG	300
AGAACAGAAT	GGGACTGGTG	GGTACCAGCG	GGCCTTTCCT	CCCAGGACCA	ACCCTGAAAA	360
ACACAGCCAA	AGGAAGAGCA	ATCTGGCCCA	GGTGGAGCAC	TGGGCAAGGG	CCCAGAAAGG	420
GGATAGCAGG	AGTCTTCCCT	TGGACCAGAC	GCTTCCTCGC	CAGGGTCCTG	GCCAATCCCT	480
GTCCTTCCCA	GAAAACCTACC	AGACTCTTCC	CAAGAGCACC	CGAAACGCCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCGGCC	AAAGAGGCCT	AATGGATCTA	GTCACCTTCA	GATTTCAATT	TGAGGTTAAG	60
TATATAAAGC	ACATCCCAAT	TTTATATGCT	GCCTTGAGAA	AATTACAGGA	TGCACGGCAA	120
TTTGTAGGAA	TTTCAAATGG	GATCATTTAA	ACATTTGAAA	AATTATTTTA	AAAACCATCT	180
AGTTTGCTTT	TGGATTTTAA	ACATTAAAGC	CTATGTTGTC	TTGTTAACAG	GGGTGGAATG	240
TATAACCATC	AGATTCAGCA	TGTGATTTCA	CCTTTGAATC	TGAGTATTTT	TTCCCTATCT	300
TCTTTGAGTC	ATTTTGGAG	CAGACTGTCA	CCAGTATTGA	TAACTAAGCA	TTAAAGGGAA	360
AAGTTGCATT	GCAACTATGC	ATTGTTTCC	TGGAAGAACT	TTTCTTTTGT	TTTAGTGAAT	420
GAAGAGGCTT	GATGGGATCA	CTTACTGTAA	CTCCTTCTAC	ATAAGGACCC	CTTCTGCAAG	480
CAGAACACAA	AAGAACACGC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 441 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCGGCC	AAAGAGGCCT	ATGTTATTGG	GAAGGACCCA	GAGAACAAAA	AGTTGAATAC	60
GGAAAAGAAA	ATAGGATTTG	CAAGAAGCAC	NTTTTTTTT	TTTTTTTTT	TTTNGAGACA	120
AANTCTCGNT	TTGCANTCCA	GCCTGGGTGA	CAAGAGCAAA	ACCTNGTNTC	CAAGNAAAAA	180
AAAATACAGT	TTGGTGATA	ATACAGTTTG	AAAGTAATTA	GCATGTGGAT	AGTCATAGAA	240
ACCACAGGCA	TCAATGAAAC	TGGCTAGGAG	AAAGGACACC	AAGAGGAAAT	GGCCAGAGGT	300
AACAGGAAAA	TCAGGGGAGT	GTGGTTCACA	GAAGCCTGGG	AAGTGCTATT	TCAAGAAGAG	360
AGTGGGTGGA	AATTGTTAAG	TGTCTAATGC	TGCTCAGAAG	CCAAGCAAGA	TAAAGACAGA	420
AGAATCTAGT	GGGAACTCGA	G				441

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 382 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC	AAAGAGGCCT	AGCAGAACCC	GACCAGGGGA	GCCTTGCCTG	TGTGTTTCAG	60
GTGCTCTGCG	ACCACTTCTA	TAAAACCTAA	AAAAGGAGAT	TGCTCTGATT	GCAACAGGTG	120
TGGGGGACCA	GTATCCCATC	CCATTGGCCC	TGCCCTCCCA	CCTGTAAGGC	AGAATATGGT	180
TGGGAAATCA	TTGCCATATG	CAGAAGGGGT	CACTGAGGGG	TTTAAACAA	CAGTGACATG	240
CTCAGTTCTC	TGGGTTGAGG	CATCATCACC	CTGGTGGCCA	TGTGGAGGAT	GGACTGGAAA	300
AGGCATTTCAG	TTAGAAGACC	TCTGCAGGAG	TCCAAGGAAG	AAACAGGCAA	ATCTGCAGGA	360
GGCAGGCATA	TCCAAGCTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:1159:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC	AAAGAGGCCT	AGCCTCGGTG	ATTTCAGTG	GAAGAATGTA	GGTCCCAATA	60
CCACAAGCAC	AGTCATTAGC	ACAGATGCTT	TTAGGCCAGG	AGTTCGATAT	GACTTCAGAA	120
TTTATGGGTT	ATCTACAAAA	AGGATTGCTT	GTTTATTAGA	GAAAAAAAAC	AGGATACTCT	180
CAGGAACCTG	CTCCTTCAGA	CAACCCTCAC	GTGCTGGTGG	ATACATTGAC	ATCCCACTCC	240
TTCACTCTGA	GTGGGAAAGA	TTACTCTACT	GAATCTCAAC	CTGGTTTAT	ACAAGGGTAC	300
CATGTCTATC	TGAAATCCAA	GGCGAGGCAG	TGCCACACCG	ATCTCGAG		348

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GAATTCGGCC	AAAGAGGCCT	AGAAAACTG	AAAAAATAAG	AAACTTTAGA	GAAAAAGAGG	60
AATCAGTGCA	GGCTAGGGGA	ATGAACTTGG	TAATCCAGTA	GTCTTCCCT	GCCAGCATT	120
TGATTGATAA	GCTAAGTGTC	TGCTTTTCT	CATCCCTTAT	TTTTTGGCAG	GAAACAGTA	180
TTTTGATACT	TGAATGCCTT	CTTTCTATCT	TAAGGGAGAA	GCCTTCTTAA	ACTTCAAGTG	240
TGAAGTAGAT	CCTTTAGGTA	TAGGATGAAA	AATTAAGTGG	GACTATTTGT	GAATTACTAA	300
ATCGCAACTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 92 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

GAATTCGGCC	AAAGAGGCCT	AGGAGCCTAG	AAAAGAAGAA	AGGTCTATTT	TTATAAAAC	60
TGATGAAATA	CTTGTGGCAG	GGAGTCCTCG	AG			92

(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

GAATTCGGCA	AAAGAGGCCT	AGTGCATAAG	GAATCACTGT	GTACAAACTG	GCCAAGTGCT	60
TCTGTAGATA	ACGTCAGTGG	AGTAAATATT	CGACAGGCCA	TAACTTGAGT	CTATTGCCTT	120
GCCTTTATTA	CATGTACATT	TTGAAATCTG	TGACCAAGTGA	TTGGGGTTTT	ATTTGTATT	180
TGCAGGGTTT	GTCATTAATA	ATTAATGCC	CTCTCTTACA	GAACACTCCT	ATTTGTACCT	240
CAACAAATGC	AAATTTTCCC	CGTTTGCCCT	ACGCCCTTT	TGATACACCA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

GAATTCGGCC	AAAGAGGCCT	ATTAAAAATA	AGTGTCTAAT	ACTGTGTATT	CATATAGCCT	60
TTATATCTCA	ATACGTGCTT	ATCTGTTGGT	ATACCTTAGA	GAAATAACCC	ACCATCAATG	120
AGAAGAAGGA	AAGGCAGGAG	GAAAAAAGTT	TATATAACAC	TTTAAATGG	TAGATTATTT	180
GTGGCCATTT	GAATTTACTG	ATTTGAAGTT	CTTAAAGATG	CTGAGCCATG	CCTTACATAG	240
TTATTTTAGA	ATCTAAAGTT	GTTCTGTATT	TGCATAACGT	TTCTGTTCTT	TTTCTTCTTT	300
AAACCCTGAA	AGTGATAGAT	GGGAAGGAGG	AACCAGATAT	TTGGCATGGT	CTGACAAAAA	360
TTAACTTGTC	AACTCGAG					378

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

GAATTCGGCC	AAAGAGGCCT	ACTCCAGGGT	ACTTTTCCCC	TAGGCCTGAC	CTTTTAGTGT	60
CTTTTGTCC	ANACATATTT	AAGACCAGAG	GAAAAAAGCA	ATTGCTTTAG	TTTCTATGTT	120
TGGGTAACAA	AATCTACCCA	CAGACAAGAG	AATAACAAAA	ACCAAACAGT	ACAGTGGGAA	180
ATATACCAGA	AAGGAAAAAA	AAGATCATCA	CATTAAATGT	AAATGAGGTA	AATTTTATA	240
ATAAAGAATC	TTTTATGAAG	AATGTCTCAA	ACCAAATATT	GTA CTTTCCA	ATTTCTTGGG	300
CACTGGGGAT	GCTGAAGTGT	AGTTAGATGA	GTATATAACC	CTATAGGGCT	CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

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GAATTCGGCC AAAGAGGCCT AGTCTTCTGC CCCCTATGA AGTTTGAGTT TCAGCCCCAC      60
ATGGGGGATA TGGCTTCCCA GCTCTGTGCC CAGCAGCCTG TCCAGAGTGA GCTGGTACAG      120
AGATGCCAAC AACTGCAGTC TCGCTTATCC ACTCTAAAGA TTGAAAACGA AGAGGTAAAG      180
AAGACAATGG AGGCCACCCT GCAAACCATC CAGGACATTG TGA CTGTGCGA GGACTTTGAT      240
GTGTCTGACT GCTTCCAGTA CAGCAACTCC ATGGAGTCCG TCAAGTCCAC GGTCTCTGAA      300
ACCTTCATGA GCAAGCCCAG CATTGCTAAG AGGAGAGCCA ACCAGCAAAT CCTCGAG      357

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(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

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GAATTCGGCC TTCATGGCCT AGACAGGCGG ACCCAGAGAG ACTTGCACTA CGTGGAGAAG      60
ATGGAGAACC AAATGAAAGG ACTGGAGTCC AAGTTCAAAC AGGTGGAGGA GAGTCATAAG      120
CAACACCTGG CCAGGCAGTT TAAGGGCTAA CTTAAAAGAG TTTTTCAT GCTGCAGTGA      180
CTGAAGAAGC AGTCCACTCC CATGTAACCA TGAAAGAGAG CCAGAGAGCT TTTTGCACCA      240
TGCATTTTTA CTATTATTTT CCAATACTTA GCACCATTTT ACTAAGGAAC CTTGAATACA      300
ACGAGGATCC TCCTTTCAT GCGACTGTAG CTGCATTTC TGAATAGTTT GAACCCTTGT      360
CAATGCAATC TCGAG      375

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(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GGCTTATTGA TGA CTCTTAT TTAAATTATG TTTT TAGCAA TGATAAGTTA CAATATAATA      60
GCTGGAGATA CTTTGAGCAA AGTTTTTCAA AGAATCCAG GAGTTGATCC TGAAAACGTG      120
TTTATTGGTC GCCACTTCAT TATTGGACTT TCCACAGTTA CCTTTACTCT GCCTTTATCC      180
TTGTACCGAA ATATAGCAAA GCTTGGAAG GTCTCCCTCA TCTCTACAGG TTAAACAACT      240
CTGATTCTTG GAATTGTAAT GGCAAGGGCA ATTTCACTGG GTCCACACAT ACCAAAAACA      300
GAAGACGCTT GGGTATTGTC AAAGCCCAAT GCCATTCAAG CGGTCGGGGT TATGTCTTTT      360
GGGGACGTTT TCGAG      375

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 552 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCGGCC	TTCATGTCTC	TGCAATCTGA	AAATAGTGCC	TTTACCAAG	AAGAGGACAG	60
AATTGGCGTT	TGGAAGGCTG	AGGGTCATGG	TGTAAGGGCT	TTTGAGTCAA	AATCTTGGTG	120
TCAAGCAGAT	GAGGCTGCAA	CACAGACCTG	TGACCAAAC	TGTGTGGAGC	GTGTGGTGGA	180
CACGCAGGGG	ACTGTGCAGA	GGACAGATGG	CCTAAAGCTT	AGCATGGCAC	AAGGAGTGCC	240
CCCCGATGGC	AAGTCTCCCA	GTCAACTCCA	GATCTCTTCA	CAGTAACTGT	GTTTCCTCCG	300
CATTTATTTT	CAACCTGCAC	AGAGGAAGAA	GAGAGGGAAA	CAAGCCCAGG	TGACAAAACA	360
GAGGGTGAAA	TATGTGTGAA	GAGTTCAGTC	AGTGTGTCAC	GAGACCAGCT	GAGTGACCTT	420
CAAAGGTTAG	AAGGTAGTGA	AAAAGAATCA	CTGCAAGCAA	AGTATAGTGA	GACAAGTGAA	480
GATGACATAG	AGACTGTCAA	GTCAGATTCT	AAAACAACCT	ATGAGTGGGG	AACAGGNACA	540
CAAAAACCTCG	AG					552

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

GAATTCGGCC	TTCATGGCCT	AGAGCGGAGT	AAATTCTCCA	CAAGCTGGGA	ACAAACCTCG	60
TCCCAACTCC	CACCCACCGG	CGTTTCTCCA	GCTCGATCTG	GAGGCTGCTT	CGCCAGTGTG	120
GGACGCAGCT	GACGCCCGCT	TATTAGCTCT	CGCTGCGTCG	CCC CGGCTCA	GAAGCTCCGT	180
GGCGGCGGCG	ACCGTGACGA	GAAGCCCACG	GCCAGCTCAG	TTTTCTTCTA	CTTTGGGAGA	240
GAGAGAAAGT	CAGATGCCCC	TTTTAAACTC	CCTCTTCAAA	ACTCATCTCC	TGGGTGACTG	300
AGTTAATAGA	GTGGATACAA	CCTTGCTGAA	GATGAAGAAT	ATACCATATT	GAGGATATTT	360
TTTTTCTTTT	TTTTTTCAAG	TCTTGATTGT	TGGCTTACCT	CAAGTTACCA	TTTTTCAGTC	420
AAGTCTGTTT	GTTTGCTTCT	TCAGAAATGT	TTTTTACAAT	CTCAAGAAAA	AATATGTCCC	480
AGAAATTGAG	TTTACTGTTG	CTTGATTGTG	GACTCATTTG	GGGATTGATG	TTACTGCACT	540
ATACTTTTCA	ACAACCAGAA	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GAATTCGGCC	AAAGAGGCCT	AGGGAGTCAA	TCATGATCNT	TTCATATATG	CTGGCNATAG	60
AAAATGGTCT	CGGTGAAGTA	ATGGTCTGTC	TGTCAAGCAT	GACATCCTTG	CCTGTGTTAA	120
GTTTTTGTTG	CTCTTCTGGG	ATGTTGATCG	TGACGCTTTG	TCCGGGATTG	AGAAGCTTCT	180
GTTGCTCTTC	TGGGATGTCA	TTCATGATCT	CTTCATATAT	GCTGGCTATA	GAAATTGGGC	240
TCTGTGAAGA	AATAGTGTGT	CCAAAACCTT	GGTACAGGCC	CCCTGGGGAG	GGTACCTTTG	300
AAGAACCAGA	AGTTAGATCT	TGTGAAGAAG	AAGAAAGTAG	GCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCGGCC TTCATGGCCT ACTTTTGGG GACTGGTACT GGAGAAAAAT CTGAGAGCAA	60
AAGTGCTTGG CTAAATTCCC TTTTCTTCT TTTAGTTTTT GAAATCATGA ATCCTGTTTA	120
TAGTCCTGGA TCTTCTGGGG TTCCCTATGC AAATGCCAAA GGAATTGGTT ATCCAGCTGG	180
TTTTCCCATG GGCTATGCAG CAGCAGCTCC CTGCCTATTC TCCTAACATG TATCCTGGAG	240
CGAATCCTAC CTTCCAAACA GGTTACACTC CTGGCACACC TTACAAAGTG TCCTGTTCCC	300
CCACCAGCGG GGCTGTGCCA CCGTACGTCC CCCTCGAG	338

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 294 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAATTCGGCC TTCATAATCT CCTGCTCTTG AGAATGTGCC GATATGTCAA AATATCTACT	60
GAAACTGAAG AAAGTGAAG ATCCCTACAC TGCTGTAAGG ACCAAAATAT TAATGGGAAT	120
GGCCCAAATG GCATACATGA AGAAGGCTCA CCAAGTGAAA TGGAAACAGA TGAGCCAGAT	180
GATGAATCCA GCCAGGATCA AGAACTCCC TCAGAGAATG AAAACAGTCA GTCTGAAGAT	240
TCAGTTGGAG GAGATAATGA TTCTGAAAAT GGATTATGTA CCGGGATACT CGAG	294

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 286 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT ACATAAAGA ACGAAAAGGA AGGAACTTCA GTCAACATAT	60
TTTCATTGAC TCCTTAGTAC AAGGGAACCT TAATGACCAA CAGATCCTAG AAGACAGTAT	120
GATATTTTCT CTGGCCAGTT GCATAATAAC TGCAAAATTG TGTACCTGGG CAATCTGTTT	180
TTTAACCACC TCTGAAGAAG TTCAAAAAA ATTATATGAA GAGATAAACC AAGTTTTTGG	240
AAATGGTCCT GTTACTCCAG AGAAAATTGA GCAGCTCAGA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 421 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

```

GAATTCGGCC TTCATGGCCT AAATATGAAA AGACTAGACA TACAGAGATA TTTATCATAG      60
CAAAAAGTTG CAAGTACTGG GGATTGACAA AATTATCACA ATGGTTATAT TATTATTATT      120
ATTATTATTA TTATTTAATC AATCAGTGTC TTGCTTTGTT GCCCAGACTG GTTTCAAATC      180
CCTGGCCTCA CGTGATCCTC CCGCCTCAGC TTCCCAAATT GCTGGGATTA CAGGCATGAA      240
CCACCGCGCC TGGCCTATTG TTCTGCCACA TCTTTCTTTT ATTTTGTAGA GAGAGTCTTG      300
CTTAGTCCAG GCTGGAGTAG AGTTGTGCCG TCATAGCTCA CTGCAGTCTC AATTTCTTGG      360
GCTCAAGCAA TCCTCCTGCC TCAGCCTCTT GAGTAGCTGG GAATACAGGC AACTCTCGA      420
G

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(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

```

GAATTCGGCC TCATGGCCTA GTGCTTAAAA GCTGTTCTCA TAAGAATTCT ACTGGCCTGT      60
ATCTACCCAA CCACTTTCTA TACCTCTCTT CCAACCAAAA GTCTTAATAT GGAATATCC      120
CTCACCACGA TCCTAATACT GTCAGTAGCT GTCCTGCTGT CCACAGCAGC CCCTCCGAGC      180
TGCCGTGAGT GTTATCAGTC TTTGCACTAC AGAGGGGAGA TGCAACAATA CTTTACTTAC      240
CATACTCATA TAGAAAGATC CTGTTATGGA AACTTAATCG AGGAATGTGT TGAATCAGGA      300
AAGAGTTATT ATAAAGTAAA GAATCCAGGT GCACTCGAG      339

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(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCATGGCCT AGGGTCACCG GGTTCGGGGC TAAAGAAGCC CCCGCGCTCC      60
CTAGAATCCA GGAACGGGGA CTGGCAGAGG CCTGGGTAGG AGTCCATTGG GCTGCTGGAG      120
GGCAGATTGC CCAAAGGGAG TCCACCTTGA AGAAAGGGCC TCTGCAGTGG CGTACGGCTG      180
CCTTNTAGGC CAGGGGTTCC ACAACCCAGA TGCTGTTCTC GTTCAGAGCC CAGAACATCC      240
TTGAAGAGCT GCTGCAGGTC CTTGGATTCC ATCTTGGGCA GTTCTCTGTG GAAATCCTGT      300
CTAAGTCAGA GCTAAGCATC CCTTCACCTG GGGTGCCTGG CTTCTCAGGG TCACTGGGCA      360
CTGGGGATGC CTTACGCCCC CCATCCTCAG GTCCTGGTGT ATCGGCTTTG CCCTCGAG      418

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(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

GAATTCGGCC TTCATGGCCT AAAGAACCCC GTGGTGATGG TGGACGAGAT TATGAGCTCC      60
AGCCCTCCCA AGTTCACCTT CCCTGAAGCA GGCTTACGAA TCATGATCAC CAATAAGTTT      120
GGACCTAGGA CCCGACTACG GATGGCCAGC AGGATCATCA TTAATGAGCG GCAGAGACTG      180
ATCAACTCGG CCAATGGTGT GAGCAGTAAG CCGCTTCAAA ACGGGAGGCA CGAGAACATT      240
GAGAACGGGA ATGTTCTGTG GGAAAACCCC GAAGACCCTC AGCAGAATCA GGAGCAGCAG      300
CCGCCGCCAC AGCCACCACC GCCAGAGCCA GAGCCGGTGG AGGCTGACTT CCTGTCCCCC      360
TTCTCCGTGC CGGGCTGGAG TGTAGTGGCA TGATCTCCGC TGA CTGCAAC CTCCGCTTCC      420
CGGACTCTC GAG                                     433

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(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTCGGCC TTCATGGCCT AGTTGTTGTA AGCATATTTA TGGTAATTTG TTACTGCACC      60
CTTGGGAAAC TAACACACCA AGGTTTCATGG ACAGCATGAA AAAGAAAAAC CATAGGCCAA      120
TATTTGTTAG GAAAAGACAC AAAAGATCTA AACAAATATT AGCTCCTACC CCTCCAAAAA      180
AGCAAATTC AATCCAGTAAG GCATTTGAAA AATATGTCAT GACTAATGAA CTTATTTAAG      240
TTTACCCAC AATACAAGGA TGGTTTAAAT TTTACAAAAA GTATTCATT AATTCATCAT      300
ATTGATAAG GAGGAAATTT AATTAAGATA ATCTCTTGAT TGTCTCTTCA TATCTTTTGA      360
TTATCTCGAG                                     370

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(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```

GAATTCGGCC TTCATGGCCT AAAAAATACA AAAAAAAAC NNNANNGAAG AAAAAAGAAA      60
AAACTACCAG CCTGAAAATG CATAGTGTTC GCTACCTTAT TGCTTTTAGC ACATCTAGAA      120
AGACACTAAA CCCAGTGAGA TTGCAAGTTT CAAAATATTG TGTGTATAT GCCTTTGCTT      180
AAACGGATAT ATTTGTTTCT GAGTGAAAAC TTTTACGTA GAGGTTTATT TGTAAGGCT      240
TGTAACCTTA AGTGTAAGTT TTAGTGTGTG TGTTAAGTTG TTCTTACCCC GCATTAGCAC      300
TCGAG                                     305

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(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 605 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC	TTCATGGCCT	AGCTGGGAGG	TGTAGTTGT	AGCGAGCCGA	GATCACGCCA	60
CTGCACTCCA	GCCTGGGCAC	TATTGAGCAC	TGAGTGAACG	AGACTCCGTC	TGCAATCCTG	120
GCACCTCGGG	AGGCTGAGGC	TGGCGGATCA	CTCGCGGTTA	AGGGCTGGAG	ACCGGCCCGG	180
CCAACACAGC	GAAACCCCGT	CTCCACCAAA	ACCAGTCAGG	CGTGGTGGCG	CGTGCCTGCA	240
ATCGCAGGCA	CTCGGCAGGC	TGAGGCAGGA	GAATCAGGCA	GGGAGGTTGC	AGTGAGCCGA	300
GATGGCAGCA	GTACAGTCCA	GCTTCGGGCT	CCGCATGAGA	GGGAGACCGT	GGAAAGAGAG	360
GGAAACCGTG	GGGAGAGGGA	GAGGGAGAGG	GAGAGGGGAG	CGATTCTGGT	GTATCTTAAC	420
TTGGATTTCT	ATCCTGTTTG	GGTTTGCTCA	GCTGAATCTA	TAGGTTTGTG	TATAATACCA	480
AAGTATTTTG	TATTAGTGGT	TACAACGCAA	AGTTGGATCG	TGAAGTCAAT	TTTGTGGCTT	540
ATGACTAGTA	TTATGATTGG	TTTTTAATAG	AATAGAAAAT	GAAAATATAT	CCCAGGTATC	600
TCGAG						605

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC	TTCATGGCCT	AGGAGAGTGG	TGATGGTGGC	ACAACAATGT	GAATGTAATT	60
AATGCTACTG	AGTTGTATGC	TTAAAAATGA	AAAATTTTAT	GTTATACACA	TTTTATGACA	120
AAAATTAATA	GATGTATTAA	TAAGATTAAA	TGGGTTGTTT	TAATGTTCTG	TTAAAATCAA	180
ACGCTGAGGG	CATTAATAGA	GATTCTTATT	TACCCACATG	TCCTTTTAAA	ACAAGAACCC	240
TCTTTAATAT	GTGTTTTCTT	CTGGTTTATA	GAACATATTT	TAAAACGGGC	TTACTATTCA	300
ATAATATCAA	TTGATTATTG	AGGAATACAA	GTTAATTAAA	TTGTGCAAGT	CAGTTGTTTG	360
GCCTTACTTC	ATGCTTTTGG	TGAACACTGA	TGCAGTACTA	GAATTACTCT	TTTGTATAAA	420
TTGCCAAAAG	CAGGCCACCT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCGGCC	TTCATGGCCT	ACTGTTTCAA	AAAAAAAAAA	AGGAATCCAA	AGAAAAAAAT	60
ACATCACCTG	CAAAAGGTGA	AGAGAGAAAG	GAAGCTTTTT	CTCTAAAAAT	GGTGCACTA	120
TCCTCTGAAC	CAATTTCTT	CGGTTTAATG	TACCTGTATC	TTGGGGTTTT	TTTCCACTTA	180
ATTTATCCTG	GAGCTCTTTC	CATAACAACA	CTTGGAAGC	ACTCTCATCC	TTTTTCACT	240
GCTGAACAGA	ATTCCACTGT	GCGGATGGAA	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCGGCC TTCATGGCCT AGCATGTTGA GATAACTTCT GGGATTAAAA TAGTCTTTTG	60
CTTTACTTTT TTGGTTTCCT AAAACAACCT TATTGACTTT TAGTCCATAC TGTTATATTT	120
TTGTCTTAAA GAAAATTTAA ACTACAAATA CCAAAAGAAA ACATTTTAAA TTTAGGGATG	180
AGACTTTGGT GTATCGTGGG TCTAGGTTTA ATGAACACAT CTGGGGTTAA GTTGGCATT	240
CTTCACATCT CCACACCCAC ACCAACCATC ACAGCCCCC AAAATCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 364 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGCC TTCATGGCCT AAGGGGAGGC AGAGGCTGTA GTGAGCCGAG ATCGCGCCAC	60
TGTACTCCAG CCTGGGCAAC AACAGTGAAA CTCCGTCTCC AAAAAAAAAA AAAAAAAAAA	120
AAAACCTTGT TTCCCTTTGT AATTGGTTT TCCTAAAAAT TTTAGTATTT CTAGAGAACA	180
TTTTTTTCCC AGGCTGTTAA CTGGTTCTGA AAACAATCTT ACAGTAAGTA TAATTTAAAA	240
CATACCTCCT TTTCCAAAAG CTCATTGTGT ACCAAGCAAG CACGTCTGTA GTTAAAATTT	300
GTTACTGAGG TTGGTTCAAG GTAAGAAGAA TGGAGAATAT TTACAACATC TTCAAATTCT	360
CGAG	364

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 384 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GAATTCGGCC TTCATGGCCT AGAGTAAAGG TGGGATTACA GGTGTGTGCC ACCACGCCTG	60
GCTAATTTTT TTGTATTTTT AGTAGAGACA GGGTTTCACC ATGTTGGCCA GGCTGGTCTT	120
AAACTCCCGA CTTCAAGTGA TCTGTCCACC TTGGCCTCCC CAAGTGTGGG ATTACACGTA	180
TGAGTCACCA AGCCCGGCCT GTATCCTTTA TAAAAGAAA CAAACAAACA AACAAAAAAC	240
CCTTTTCTTG ACTGACATCC CTTTTCAGCT GCAGCCCTGT TTCTTTGCTA CCTTTGTAGC	300
AAAATTCAC TGGTTGTTCC TACTTGCTGT TTCCAGTTTT TTGGTTTTTT TCCTTTCCTA	360
GGAAATGAGA GGCCCATGCT CGAG	384

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs
(B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

CTCGAGGGGG	TCAATTCCTG	GGGGCTCTTG	ATATTGCTCA	GAGCTCTGGA	GAAGTGTTC	60
TCCACTACGC	TGCTGATGTC	CCCTTGGAAG	TAGGTGAAAA	GGACACACCG	GGAATTCCAT	120
TCCGTCTTTA	TAGGCTTCTG	TTTGCCTTTG	GGCAGCCGGA	TGGCAGTCTT	CTTCATTCT	180
TCCATTGTGA	GTGAATGACA	CAGGTGACAG	CTCTTAATTC	TGGACCATCA	CCTGATTCTG	240
TGGCTGGGAA	AAGATGGCCA	GAGCTGCCTG	GCTCACTTCA	GAGCAGGTTA	GTGCTTGCGG	300
AAGCAGGAGC	TGAGGATTTG	TACTAGGCCA	TGAAGGCCGA	ATTC		344

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 0 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTCGGCC	TTCATGGCCT	AGCGATGGCT	CACATCAGCA	CTTTGGGAGG	CTGGGGCAAG	60
AGCATCACCT	GAAGCCAGGA	GTTCAAGCCC	AGCCTCGGCA	ACACAGTGAG	ATCTCATCTC	120
TACAAAAAAT	TTAAAAATGA	GTTTGGCGTG	GTGGTACATA	ATCGTGTAGT	CCCTGCTACT	180
TGGGAAGCTG	AGGCGGAAGG	ATCACCTGGG	CTCAGAAGTT	CAAGGCTGCA	GTGAGCTATG	240
ACTGCACCAC	TGCACACCAG	CGTGGGTGAC	ACAGTGAGAG	CCTATTAAAA	AAAAAAACAA	300
AACCAATAAA	CCAAACAAAC	AAAACCTAAA	ATACAAAAAA	TTAGCTGGGC	GCAGAGGCAC	360
GGGCCTGTAG	TCCCAGCTAC	AAAGAAACCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC	TTCATGGCCT	AGGAGATGTA	CCTGATAGCA	ANTTACTGCN	TCTCAGCTCA	60
AAATTCACCC	TTCAAAACCT	TTTCTACACC	AATGGATAGA	ATTCCTGTCA	GCATTTCTCT	120
TNNAACGTTG	AACACAATGT	TAAGCTTCCT	CAGTGAAGGA	CCCTAGATGG	ACATTGCAGG	180
AAGAAAGGAC	TTCCCTGTT	GGACCTAGAG	GTTGTACCAG	CATTGTAGGT	GGGAGGACAT	240
CCACTGGCTC	TTTGCAATAG	CCATGTGTCC	ATAAAGTATA	GTTTCTCAGC	AATCTCATTG	300
CCCAGTCTAG	GCNTGGCAAT	CACCTCCTG	CAGCCTTATC	AACACATTGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GAATTCGGCC	TTCATGGCCT	ACTTGGAGAG	CCTCATGCCG	TCTCTACCTT	CGCACACTGG	60
TCAAGTATCT	GCTGAGCTTC	TTGGCCGCAA	GGATGCAGAA	ATAGGCTGAG	GGTCCATGGG	120
AAGAAAGACA	CAATGAGGCA	GTAGGAGGTG	GGAAGAAAAG	AAGACAGACT	TTCAAAATGG	180
AATTAGGCAC	TGGGGAGAGA	TCAGTTTCCC	CACATCAGGG	AGAAGAAGGT	ATAGGTGGGG	240
AAGGGGGTGG	CCAGGAGCAG	AAGGAAGAAG	ACTCAAGATG	GAAAGGGAGC	CGCTGTGCCT	300
GTGGCAATAC	CACCTGGAGA	GGTCGACTTC	ATACCTTCAA	GCCTTTTCCC	CTGGGCTTTT	360
GATTGTGTCT	GTGCCCCCTT	TCTTGTCTC	TCTGCAGATG	CCCAGTAGGG	GCTACCTCAT	420
CCTCGTGCTG	TTCTTGTGTA	GCATTCTCGA	G			451

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC	TTCATGGCCT	AACAGAGATG	GCTTAGACTT	CAAGACTTGA	TTTGTAGCTA	60
TGTTCTACCA	GCCTCCAGCT	GTCTATGCGT	TGGCCTCACG	CATGTCCCAA	ACGTGGTCCC	120
ACACATGTTT	ACACATTGGT	CCCACATATG	CTGAGAGTAA	TTACTTTCTA	TTCATCAGAG	180
GTCAGAATAG	AATAAAGAAT	GTTTATGTCA	TAGTATGACT	TTTTAGGTGA	TTTTGAAAAG	240
CAAGAATATG	AATTCTATGA	AAAAAATCTA	TTAGGAAATT	ATGGAAATGA	CAGAATGCAG	300
AGGTATTTGG	AAATAGAAAA	AAAACGGGTG	ATCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTCGGCC	TTCATGGCCT	ACCGACCACA	TTTCACTCTC	ACCGCTGTAG	GAATCCAGAT	60
GCAGGCCAAG	TACAGCAGCA	CGAGGGACAT	GCTGGATGAT	GATGGGGACA	CCACCATGAG	120
CCTGCATTCT	CAAGCCTCTG	CCACAACCTG	GCATCCAGAG	CCCCGGCGCA	CAGAGCACAG	180
GGCTCCCTCT	TCAACGTGGC	GACCAAGTGGC	CCTGACCCTG	CTGACTTTGT	GCTTGGTGCT	240
GCTGATAGGG	CTGGCAGCCC	TGGGGCTTTT	GTTTTTTCAG	TACTACCAGC	TCTCCAATAC	300
TGGTCAAGAC	ACCGCACTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:1193:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

CTCGAGGGGT	GCTGAGCATT	TTTTTCATGA	ACCTGTGGTC	ATTCATATGT	CTTCTTTTGA	60
GATGTGTCTA	TTCAGGTCCT	TGCTTATAT	TTAATCAAG	TTATTGTTT	ACTATTGAGT	120
GAAAGAGTTC	TTTATGTATT	TGGTTATTA	GCCCCTTAAC	AGATATATGT	ATAGCTTGCA	180
AAATATTTTT	CCCACTCTGT	GGGTGTCTC	TTCAATTTGT	TAATCTTTT	TTTTTTTTTT	240
GTTGCTGGGC	AGAACGTTTT	TAGTTTGATG	CAATCCCATC	TGTCTATTTT	TGCTTTTGTT	300
GCCTGAGCTT	TTGGGGTCAT	AGCCAAAAAA	TCCTTGCCCA	AACAGCAGTG	TTATGGAGCT	360
TTTCCCCTAA	GTTTTTAGGC	CATGAAGGCC	GAATTC			396

(2) INFORMATION FOR SEQ ID NO:1194:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 302 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

GAATTCGGCC	AAAGAGGCCT	AGGTAGGGAA	TGCAAGCAGG	CACTGGGGAG	AAATNGGGCN	60
GGAAAGTAGT	CTCATGGAAT	AAGCCTTTTT	TACTTTAATT	CAGCATTTAT	TGCTTTGATT	120
AAAAAATAAT	TTCAAAAATC	TTTCTGCTTA	CTGAATAAAG	AATGCNTTGG	AAAGAACAAG	180
AATGGATAAA	GGAGAGTGCT	TAGGAGGCTC	CTGGAGCAGG	AAGAGGTGGT	GGCGAATAGA	240
CTACCGGAGC	AGTGGAGGGT	GGAGATGGAG	AGACGTGGAA	AGACTGAAGA	CATATCCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:1195:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

GAATTCGGCC	AAAGAGGCCT	ACTCAGAAAC	ACAAGGGAAA	GGACAGAAGA	GGGACCGGGG	60
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AGGAAGAGAG	TGAGGAGAGA	GGTATGTAAG	GTGTTTAGTA	CACAGTAAGT	GCTCAAAATG	120
TGTCCACTCC	CTCTGCCAGG	AGAGAGCAGA	AAGTCAGAAA	GGAGAGGACA	CCAATAGAGA	180
GGAAAGAAAG	GGGCCAGGCG	CCGTGGCTCA	TGTCTGTAAT	CCTAGCACTT	TGAGAGGCAG	240
AGGTGGGAGG	ATCGCTTGAG	CCCGAGAGTT	CGAGACCAGC	CTGGCCAACG	TAGAGAGACC	300
CTGTCTCTAC	AAAAAATACA	AAAATTAGGC	TGGGTGCGGT	GGCTCATTCC	TGTAATTCCA	360
GCACTAGGGA	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1196:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 341 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

GAATTCGGCC	AAAGAGGCCT	AGTGTTACAC	AGCACTCACA	CTAAAGATGA	AAAATTCCAT	60
TAGCTCATCC	TGGTTCCTCT	GCTTACTTAC	CTAATCATCT	GTTTATGATT	TAAAAAATA	120
GGGTACTGT	GAAGAGAGTG	CTTGTTGTGTG	AGACAGAGAG	GGAGGGTTGT	TTTTCAAATG	180
TATAGAATAT	ACCAATGTAG	TTTTTGGTTG	GGTATTTTTT	TAAATCATGA	CTTTATTAAA	240
TTTACTTAAT	TAATATTCAT	TTTTATCCTT	TTTTTATGTT	TTTAAAGTTT	TTATTATTTA	300
TTAATTTATT	TGAGATAAGG	TCTTGCTCTG	TCACCCTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:1197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 363 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

GAATTCGGCC	AAAGAGGCCT	ACAGAAATTT	AAATTAATCT	CTCATCCATT	GGCTTTTGCT	60
ACTTTAGGTT	AATATTAAAA	TATAACATAC	ATTTTGGGG	TTTATGCTGT	TAGCTCCAAA	120
CCAAAAGATT	TTGGAAATTT	ATTTTGGAAA	TTTGTGTTT	AGAATATGAA	TAAATCTGCT	180
TATTCAGAAA	AATTAAACCT	TGATAACTTG	GGACCTCCTA	TTCCTGTATG	TTCTCTGACA	240
TACATTGAGG	GATTTGGCTC	TCTTTTGTTT	ATTTGTTTTA	CTAGTCAGAC	ATTCCTTTGG	300
CTGCCCATAC	TTAATTCTGT	TGGGTGTTTC	CGCCCCGCC	CTCAGCTTCT	GAAGCTACTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:1198:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 169 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

GAATTCGGCC	AAAGAGGCCT	ACCTGACAAG	TGTTAAGCAG	ACACATAGAG	AAAGTTAAAA	60
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TTTGTTTTGA GTCCTTAAGA GTGAAGTTAA GGAATAAGAC CTATAAATGG ACACCATGTG 120
 ATGAGTGTCTG TCATCAAAGC ATGGACAATG GGCTTTGAGA GTACTCGAG 169

(2) INFORMATION FOR SEQ ID NO:1199:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 82 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

GAAATTCGGCC AAAGAGGCCT ATAAAAACGT TATGTTATTT TTGGAAGTTT TTCTCATATC 60
 TCTGTTGCCA GGGTCACTCG AG 82

(2) INFORMATION FOR SEQ ID NO:1200:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

GAATTCGGCC AAAGAGGCCT AAGGTGGTGC AGTGGGGACA GCACCTCCGA CCCTATGGGG 60
 TGTACCTTCA AGTAGCAAGG CTGACAATGA TGTCTAGAAA GGTCTCCACT TCTGCCTGAG 120
 TTTTGCCAAA CCCAGTGGTC TATAGGGATG TGGCAAAAGA ATGACCTACC GCAGTGTGAT 180
 TATCAGTGTT TTTTAAATA AAGAGCACAG TTTTGCCTTT AAAATAATTC ACATCAACGG 240
 TATTTGGGAG AACATGGAGC TGGCATAACA TTGGCGTAGA AAGCAGGGCC AGGCCACCC 300
 ACGGGGCCCT CGTGTGGGGA CGGGTGCCTG AGCCCCTGAG CCCCTCGAG 349

(2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

GAATTCGGCC AAAGAGGCCT AGGGGAAGAG GTTCAAATGT GGGGCTGGAC GTGGCCTTGG 60
 GGTGCGGATC CCTCACAAAN ANTTCGTCTT CATAATCCTN ATGAGGTNGC GGGGAGTCCC 120
 GCAGGACAGA CTCAGATATT CGGAGGGAGA TCCTCCCTGG AGTGCTCGGG GCCCAAGAG 180
 GTGTGTCTGG GTCAGAAGTG CTGCATAAAC TTGGAAGACT CTGCTGTTTT TGATAGTGCT 240
 TCAGGTTTGC AAAATCAGGG GCTGAGGATT CCTCAGGAAG GNTGTCCTCT CTGGCTGCGT 300
 GGGCCCACTT TGCTCGAG 318

(2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

GAATTCGGCC AAAGAGGCCT ACTACAAGAT AACTTCCCAG TACTTTAAAA AAGTCTCAAA	60
GTCATAAACA AGAAAGAACT GAGGGACTAT TGCATATTGG AGCGATCTAA AGAAGTATTA	120
CAATTTGTGG AATTCTTGAT TAAATCCTGG ACCAGCAAAA GGACATTAGT GGGAAAATTG	180
ATGAAATTCA AATGAGATCT TATATTGAAG TTAATTGTGT CAGTGACAT TTCCTGGTTT	240
TCATAATTGC AAGTGATTAT GTAAGGTTTG TTAATATTGG GAGCAACCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

GAATTCGGCC AAAGAGGCCT AGTTTTGAGA AATAAATGGG ATAGCACGTG TAAATCACAT	60
AGAACAGTGC CTGGCACATA AACACTCAAT AAATGTTAAT TGATACTATA ATTTATCTAA	120
TTTATCTTTA TTCCTCCTGC AAAGATTCTT TGGACTATTT AGAATCTCTG TCGACTCTAA	180
TGAGATGGTG GTGTTTTTTT TTGGTTTTTT TTTTTTTTGC TTAAAGAAGC TTCGTAGAT	240
CAGCTGTAAT TTAGTGCTAA ATAATCTCTT GTAGTTATTA TTTTCAGTCT ACTTGGGATC	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT ACGAGATAAT ACTGGAGTCA ACTGTACATT AACTTGCTTG	60
GAGGGCTATG ATTTACAGA AGGGTCTACT GACAAGTATT ATTGTGCTTA TGAAGATGGC	120
GTCTGGAAAC CAACATATAC CACTGAATGG CCAGACTGTG CCATTTCTAG AAAAACGTTT	180
TGCAAAACCAC GGGTTCAAGT CCTTTGAGAT GTTCTACAAA GCAGCTCGTT GTGATGACAC	240
AGATCTGATG AAGAAGTTTT CTGAAGCATT TGAGACGACC CTGGGAAAAA TGGTCCCATC	300
ATTTTGTAGT GATGCAGAGG ACATTGACTG CAGACTGGAG GAGAACCTGA CCAAAAAATA	360
TTGCCTAGAA TATAATTATG ACTATGAAAA TGGCTTTGCA ATTGGACCAG GTGGCTGGGG	420
TGCAGCTAAT AGGCTGGATT ACTCTTACGA TGACTTCCTG GACACTGTGC AAGAAACAGC	480
CACAAGCATC GGCAATGCCA AGTCCTCAG GATTAAGAAG AGTGCCCCAT TATCTGACTA	540
TAAAATTAAG TTAATTTTTT ACATCACAGC TAGTGTGCCA TTACCCGATG ATCTCGAG	598

(2) INFORMATION FOR SEQ ID NO:1205:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC	TTCATGGCCT	AGTCTAACCA	TTATGGAAAG	AGAACAGTCC	CTTCAATATC	60
CCACTATCTG	TAGGGCATGA	CACAGCCAAA	TCCAAGTCAG	ACCATCCCTT	TGATCAATTT	120
CTACCAATAA	CTGTTTCATTG	CACACCCTGT	ACAGAGCACT	GCGACCAAGC	TGTTCCCTTGA	180
CCTTCTCCTT	TCCTAGTGTT	TGGTCACAAC	ACTCCCTAAA	GCCCTAACTC	AAGTTCTTGG	240
GATGATACCA	CCAGAAGAGG	GAAAAAAGGA	GCCGTCTTCC	TGAAGTCACC	TGGGTAGAGC	300
AGCTGGGGAT	TTTCCCTCC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1206:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC	TTCATGGCCT	ACCCACTGCA	ATGATGTTTA	CCAGCACTAT	TAAGTTACTG	60
CAGACTCTTT	GTCTGTCTGC	TGGAGTTCAT	GCTGAGATCA	TGCAGAGCGA	AGCCACCAGA	120
CTCGAG						126

(2) INFORMATION FOR SEQ ID NO:1207:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

GAATTCGGCC	TTCATGGCCT	ACTAATGTGG	TTTTGTGAAG	TTGGTGTCAA	ATTTACGAGC	60
ATAAAATTGT	TTGTAATATT	CCCTTATATT	CTTTTAAAAC	TGCTATAGGA	TCTGTACTGA	120
TGTTCTGTTT	CATACCTGAT	GTTTTGTGTC	TTCTGTTTGT	CTTTTTTNGT	TGTTGTTGTT	180
GTTGTTGTTA	GTTTTGATAG	AGGCTTACAA	ATTTTTTGCT	TAATTGATTT	TCTCTATTTT	240
CCTCTTTTAT	TTCTTCTTTT	AATAATTCCT	TCCTTCTTGC	TTTGGCTTCA	TTTTGCTCNT	300
TTTGTGTTTC	TTTTGGTAAT	TCAATTACTG	GTTTCGACATC	TTTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 198 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

GAATTCGGCC TTCATGGCCT AGAGTGATTG TGGGTTATAA TAGAGCAGAT TGTTTTAAAA	60
AGAGACTTGT GAGCCAAGAC TAAATCCTGG TTTTACTATT TATTAATCTG TATAGCTATA	120
GCCAAGCTAT TAAAACTCCC TTATTTCTCA GTTTTTTCGT TCATGAAGTG GGTACAGTAC	180
CTAAAGGTTT ATGTTGAG	198

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

GAATTCGGCC TTCATGGCCT ACAGGGGATG ATTCAGTCCG ATACAGTCAG GGAACCGTAC	60
ATAGAATAGA ATGACTAGAG TATAATCTGC AAAGGATGGA ATGGCAGAAG TAGTCAGAAG	120
AGGTATGCAA TGGTTGGATC AAAAAGAGCT TTGTATCCAG CGTCACAGGG CCTCAAATTG	180
TACTGTAATC ATATGTCTTT TACCTGTTCT CTGGCATTTA AATATTCTTG TAAAGAGCTA	240
AGCCATTACT GATAAAATGT CTGTTGTGTA CAGTTGTACA AATTAAATTC AGTCACAAAA	300
CTGAAAGAAC AGCAGTGGGA CATCTATCCT AGTGAAAGTT AGAATACTACT TTTGTGGTCT	360
TTAATAACAG AGTTGATTGT TTACCTTCTC CTTTGGTTAG AAGACTGGTA TGGGGATTGT	420
TTGGAATGAA GAGGTAGGAG AGAGAAATAA TTCAATTCTG TATTCTCCCA TCATCTTTAT	480
ATTTGAACTG AGAAATGTGT GTTCTATCA TTCATTCAA TTATTAAACA AAAACAGAGA	540
CTCGAG	546

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

GAATTCGGCC TTCATGGCCT AAAGATATTT TAGCTAACAG GAGAACGGCC CAAGGGGGCA	60
TTCTCATGTT AATTACCAA TGTGGGCTTG TCAAAATCAA ATAGCTCCAG GAATAATGCA	120
AGTAGCTCTG CATCATTATA TTGTTGGCC CTCAACCCAA TATTAGCTAC TTTTAAAAAT	180
CTGGGTTTCAT TAGGCTTTTA AATTAAAAG AGGAATCACT ATTGGGAGCC TTCAGAAGAA	240
TGTAAAGCAC AGCCAGCAGT GCCAGAGTTT AATGTAAATG ACATTAAAAA ATAGTTTCAT	300
ATCACACACT CGAG	314

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

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GAATTCGGCC TTCATGGCCT ACGCATGAAA ATTACTTAAA CGTTGCACAC AACGTTTCAC      60
AAAATCTTTT GTGAAAGAAG AAAAGGAAAT TCAGTGTGTG AGTCTCAGCA GGAGTTAAGC      120
TAATGCAGCT TAAATAATG CCGAAAAAGA AGCGCTTATC TGCGGGCAGA GTGCCCCTGA      180
TTCTCTCCT GTGCCAGATG ATTAGTGCAC TGGAAGTACC TCTTGATCTG GTACAGCCTC      240
CAACCATCAC CCAACAGTCT CCAAAAGATT ACATTATTGA CCCTCGGGAG AATATTGTAA      300
TCCAGTGTGA AGCCAAAGGG AAACCGCCCC CAAGCTTTTC CTGGACCCGT AATGGGACTC      360
ATTTTGACAT CGATAAGAC CCTCTGGTCA CCATGAAGCC TGGCACAGGG CTCGAG      416

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(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

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GAATTCGGCC TTCATGGCCT AAGGGAAGCC TGAGCAGGCC AGTGGGCTGG GCGCAGAGCG      60
GGGTGTGGGG GCCAGGCTGT GTGACCATGA CAGAAAGAAC CCCAGCTAGC CCAGCTTGCT      120
CCCTGGGGCA GGA CTACCA ACCCGTGAG GGCCTGGGGT AACAGTGGTC CAGTGGCCAA      180
GACCAGCAGT CGCCAGGTAC CCACTGGCCA CAAACCAACC AGAATACTTG CCGCTGGAGG      240
CCCCAGCCCA GGGTCAACCC AGCCGCCGCC CTGTCTTTGT GTGTGGGTGG GTCAGCCCCA      300
TCCCTGCCTT TCGGACTAAA AACTCGAG      328

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(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

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GAATTCGGCC TTCATGGCCT AGAGGCATTA ATATATTTTA CATTACTGGG ACCATAGTAC      60
AGAAATTTCT AAATGGTTTG TAAAATAACT TGTATTGTGT GTTGTGTGTA AAGCAGTTAA      120
TACAATGGAA AAAC TCGTAA TAAGAAGATA CAGTTTAAACA TCAAAAAGTT TACCCAAGGT      180
AATTATGAGT ACTACCTGGC AAAACTTCAC GGAAGCTGTG GTATCACTTT TATGATGGAA      240
GAATGGTGTG TGCATTTTGT GTAAAAGTAC TTGCGGCTGG GCGTGGTGGC TCATGTCCCA      300
GTGCTTTGGG AGGCGAAGGC AGGTGGATCA TCTGAGCCCA GGAGTTCGAG ACCAGCCTAG      360
GCAACGTGGC AAGAGCCTGT CTCTCCAAAA CCTACAAAAT TTAGCCAAGC TTGGTGGTGT      420
GAGCCTGTAG TCCAGCTAC TTGGGAGACT CACGCTGGAG GATCTCTCGA G      471

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(2) INFORMATION FOR SEQ ID NO:1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGNC	TTCATGGCCT	AGTCAATGAA	AGAATTCCTG	CAGTTTCATT	ACCTATGAAN	60
ATTGTGGGGT	CCTCTTGTGG	GACATGAAAG	GGGGACAGAT	AGATGAATAT	TGTTTGGATT	120
TTTGGTCCTC	AGTGCCATCC	ACAGACTCCA	GAAGGGATCA	GCTATTTGCT	GAACAATCTT	180
TCAGTTCTCA	TAGAGCCCTG	ATATGTTTTC	AGGGTCCACA	AATGCCTGTG	ACGGTGGCCT	240
CAAGAACCCA	GTGTCCCCTT	GTAGGTGGGA	TAGCATACCT	CTTAAAGGTC	AGCATGAGAT	300
TCCACCCATG	TCATCCCCAG	CATTGGTGGG	GTCAGCAGAT	CCTCTCTCTG	GGGTTTCNTT	360
TTCTGCTCAA	CCTCCCTGCT	TTGATGGACT	GCACAGACAA	GCCCCATCTT	GGTGGAAGGG	420
TCTCCCCATG	GGCTGTCCTG	GAGGGTCACT	CCCACAGATA	TGCCCCATCC	TGGTGGAAGG	480
GTCTCCCTGG	GGGCTGTCCT	GGAGGGTCAG	TCCCACAGAC	AAGCCCCATC	CTGTGGGAGG	540
GTCTCCCCGT	GGGCCATCCT	GGAGGGTCAG	TCCCACAAAC	TCGAG		585

(2) INFORMATION FOR SEQ ID NO:1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GCGATTGAAT	TCTAGACCTA	CCTCGATAAC	CCAAGAGACT	ATGAGCAGAC	ATGACATCAT	60
TGCGATGGGT	AATGACATAG	TATCTTTAAA	CTACACAAAA	GTGGAACAGC	TTTGTTTCAGG	120
AGCGGCCCTAT	TGCCAATTCA	TGGACATGCT	CTTCCCTGGC	TGCATTAGTT	TGAAGAAAGT	180
AAAATTTCAA	GCAAAGCTGG	AACATGAATA	TATTCACAAT	TTTAAACTTC	TGCAAGCATC	240
ATTTAAGCGA	ATGAACGTG	ATAAGGTAAT	TCCAGTGGAG	AAGCTAGTGA	AAGGACGTTT	300
CCAGGACAAC	CTGGATTFTA	TTCAATGGTT	TAAGAAATTC	TATGATGCTA	ACTACGATGG	360
GAAGGAGTAT	GATCCTGTAG	AGGCACGACA	AGGGCAAGAT	GCAATTCCTC	CTCCTGACCC	420
TGGTGAACAG	ATCTTCAACC	TGCCAAAAAA	GTCTCACCAT	GCAAACCTCC	CCACAGCAGG	480
TGCAGCTAAA	TCAAGTCCAG	CAGCTAAACC	AGGATCCACA	CTTCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:1216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GAATTCGGCC	TTCATGGCCT	ATCGGCCCCG	CGGCGGAGGG	ANANGATCCT	CCACAGTGCT	60
CTCTTCAGTN	CCCCTTCAAA	TGCTGTTTTA	TCTCAGCGGA	ANGTACTACG	CCCTGTATTT	120
CCTCGCCACG	CTCCTGATGA	TCACGTATAA	AAGTCAGGTG	TTCAGCTATC	CTCACC GGTA	180
CCTGGTCCCT	GATCTTGCTC	TGCTGTTTCT	GATGGGGATT	CTAGAAGCAG	TTCCGGTTAAA	240
CCTGGATACA	CCCCTGATGC	CCGATGTCCA	GTGAGGAACC	AAGGCTGCGG	GGAAGGGTGG	300
CCCCCACCCT	TCCTCTTGTT	ATCAGGCCCTC	AGACACACTA	GGAGGATGGA	GGCGAGTTCT	360
CTCAGCTGCC	CATCCCCTG	AGGGGTGCCC	GGCCGTCAGT	GTCTTGTTGTG	CACTCAGTGC	420
CCAGAACCTC	TAGAGCTTGC	CCCCCAGGGC	GGGCACTGCT	GGGAGGGTGC	GAGCACCGCT	480
GCGGCACAGA	GGCCCGGTTT	TTGGNTGATC	TTCTGGGGCC	TGGGCCTGCC	CTGAGGTGGT	540
GGGGACAGGG	TGTGGCCTGG	CCCTGCTGGG	GGCTGCTAGG	CCAACGGGAC	CCTCCCCAAG	600

CGCGCCGCAC ACTGCAGGTG CCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:1217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

GCAAATATTG AACATAATCT AAAATCTGAG GAAGAAAAGG ATCAGGAAAA GCAACAGATG	60
TTTGAAAATA AGCTTATAAA ATCTGAAGAA ATTAAAGATA CTATTTTGCA AACAGTAGAT	120
TTAGTTTCTC AAGAGACTGG AGAAAAAGAG GCAAATATTC AGGCAGTTGA TAGTGAAGTT	180
GGGCTTACAA AGGAAGACAC CCAAGAGAAA TTGGGGGAAG ACGACAAAAC TCAAAAAGAT	240
GTGATCAGCA ATACAAGTGA TGTGATAGGA ACATGTGAGG CAGCAGATGT GGCTCAGAAA	300
GTGGATGAAG ACAGTGCTGA GGATACGCAG AGTAATGATG GGAAAGAAGT GGTCTGAAGTA	360
GGCCAGAAAT TAATTAATAA GCCCATGGTG GGTCCTGAGG CTGGTGGTAC TAAGGAAGTT	420
CCTATTAAAG AAATAGTTGA AATGAATGAA ATAGAAGAAG GTAAAAATAA GGAACAAGCA	480
CTCGAG	486

(2) INFORMATION FOR SEQ ID NO:1218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

GAATTCGGCC TTCATGGCCT ATGAATTCTA GACCTGCCTC GAGATCTGAG CAGGAATTAC	60
TCTCAGATGA CGCTTCATCT GTTTCACAAA TTCAGTCTCA AACTCAGTCA CCGCAAAATG	120
TCCCTGAAAA ATTAGAAGAA AACCATGAGC TGTTTTCCAA GAGCTTCATC TCCATGGAAG	180
TGCCTGTCAT GGTAGTAAAT GGCAAGGATG ATATGCATGA TGTGAAGAT GAGCTTGCTA	240
AGCGAGTGAG TAGGTTAAGC ACAAGTACAA CCATAGAAAA CATCGAGATT ACTATTAAGT	300
CTCCAGAGAA AATCGAAGAA GTCCTGTCAC CTGAAGGCTC CCCTTCAAAA TCGCCATCCA	360
AGAAAAAGAA GAAATCCGC ACTCCTTCTT TTCTGAAAAA GAACAAAAAA AAGGAGAAAG	420
TTGAGGCCTA AATAAAGTCT TTTTATAATT ATTATTATAA CAATGTGACA TTGCACATCT	480
AAATACCACA TCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

GAATTCGGCC TTCATGGCCT AAAAGATGGC GGAGGTGCAG GTCCTGGTGC TTGATGGTCG

60

AGGCCATCTC	CTGGGCCGCC	TGGCGGCCAT	CGTGGCTAAA	CAGGTACTGC	TGGGCCGGAA	120
GGTGGTGGTC	GTACGCTGTG	AAGGCATCAA	CATTTCTGGC	AATTTCTACA	GAAACAAGTT	180
GAAGTACCTG	GCTTTCCTCC	GCAAGCGGAT	GAACACCAAC	CCTTCCCGAG	GCCCCTACCA	240
CTTCCGGGCC	CCCAGCCGCA	TCTTCTGGCG	GACCGTGCGA	GGTATGCTGC	CCCACAAAAC	300
CAAGCGAGGC	CAGGCCGCTC	TGGACCGTCT	CAAGGTGTTT	GACGGCATCC	CACCACCCTA	360
CGACAAGAAA	AAGCGGATGG	TGGTTCTGTC	TGCCCTCAAG	GTCGTGCGTC	TGAAGCCTAC	420
AAGAAAGTTT	GCCTATCTGG	GGCGCCTGGC	TCACGAGGTT	GGCTGGAAGT	ACCAGGCAGT	480
GACAGCCACC	CTGGAGGAGA	AGAGGAAAGA	GAGAGCCACT	CGAG		524

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

GAATTTCCGGC	CTTCATGGCC	TATGATAAGT	TCATTCTGGC	TGGAGTATGG	TGGAGAGCCA	60
TGGAGTACTG	GTAGGTGAGG	GGCTGGAGGA	GGGATAGGTT	GGAGATGTTG	AGAAAGGCTT	120
TAAAGATCGT	GGTGAGTTGT	TTGGGTTTGT	GTTGGCTGTG	AGGAGTCATC	AGAGGTTTTA	180
ATGCAGGAAA	GTGGTTTGTA	CTCTATACTC	CAGCAGCAGA	GGTTGGTTGA	GTGGTGCTCA	240
AACTTTGTTG	TGTATTGGAA	TCATCTGAAG	AGCTTATAAA	AATACCAGTA	CCCAGGCTAC	300
AAACAGTAAA	ATCAGATTTT	CTGAAGGAGA	GGCCAGATA	TTGGATTTTT	GATAATTTCC	360
CAGGTGATTC	CAGTGCGTAT	CTGAGTTTGA	GAACTACTCT	TTTAGAGGGG	TCTGATGGAG	420
TAAGGAATTC	AGAGGCCACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

GCTTGAACAA	CACAGGTTTG	AACTGTGCAG	GTCCACTTAT	CCATGAGTAT	TTTCAACCAA	60
ACTAGTATCA	AATATACAGT	ATACGCGGGA	CTTGAAACCC	ACGTGTAAGG	AGGACGAAGT	120
TTTCGTGTAA	GTCAGTCCG	AAGCACTGAC	TTTGGGACTT	GAATTTGCAC	AGATTTTGAT	180
ATGAAGTGGG	GAAGGGGGTA	ACTTGGTACA	AATCCCCTGC	ATATACTGTG	GGATGACTCT	240
AGTTTGATTC	TGGAGTGATA	TATGGAAGAC	ATAATTCTTC	CCATAAAAAA	TCATAATCTT	300
GGTAGTCTAT	CATAGTCTAG	CATTAAGAGC	ATGAACTTTG	GAGCCGTCCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

GAATTCGGCC	TTCATGGCCT	AGCTAGTTCA	TGCTTGCGTT	GAAAGAGTGG	TCGTTTGCGC	60
TGGGTCATCA	CTGTGTAGTA	TTGGGGATAC	TTAGGTGAGA	AAAAAACTTA	ACGCTAGAGA	120
CGTTCACGCA	CTAGTGGAGA	AGCCAGGATT	GTTGCCCTAG	AGTTACAGTA	GATAAAAGTA	180
CCTCAGAGAA	CTGCGGGGGC	TCCCAACCTG	GACGCTTGCA	CCGGAGTATT	AAATCCAGCT	240
AGAGAATGGC	ATGTGCAAAG	ATACAGAGCT	TTTAGAAGTT	GCCTGCATTG	CTTGGCCCCA	300
TCCTCACTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

GAATTCGGCC	TTCATGGCCT	AATAAAAACT	GGCTGGGCGT	GGTGGCGGCA	CCTGTAATTG	60
CAGCTATTTG	AGAGGCTGAG	CCAGGAGAAT	CGCTTGAACC	TGGGAGATGG	GGGTTGCAGT	120
GAGCCGAGAC	CGCCCCATCG	CACTCCAGCC	TGGGCAACAA	TAGTGAAACT	CCGTCTCAAA	180
AAGAAAAAAA	GTTTCCTTAG	AATGGAAAAT	ATTCAATCAT	GAGCTCTTTT	GGCAATCCGT	240
CATCAGTATA	TTCTGAAAAC	CAATAAGATG	TTGCCAAGTT	GGGGGCGAGA	GCTATGTAAT	300
GCAAGGCATA	TGCCTGATGA	AGTATACAAA	TACACCTGAC	CAGAAACTTT	GTCTCCCAAA	360
TAAGTCTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

GAATTCGGGC	TTCATGGNCT	AAAGAAAAGT	GCTGTAAATG	AGGATGTGGC	TTGCTGGGCA	60
ATAATCATTG	TAGAGTGGTA	CACCCAGTGC	CTTCACAGGA	TGCTTGAATA	CTGCCTGCAA	120
GCCTCGTGTC	ATTAGCCCAG	TAGGCATATG	ATAAGCCTCT	GGTCATCATT	TCCACTGTTA	180
AGAGTTAGTG	TCAGATATGG	AGCACCAATA	GGCTTGTAAG	TGAGAGCATC	CCTCAAAGTT	240
GTCACCTTAG	GAGACTCTGA	TGACCATGAT	GCTGCCATTG	TCCAAATGTG	CACTCATCTG	300
TCTTTTGGGG	AGTGATTCCC	GACAATTTAT	AGATTACAAG	AGAAAAGCAG	TCTGTATTTT	360
CATCAAATGA	TAGTTTAAAT	GGAAAATGAA	TCAGAAGTCT	CGAG		404

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GAATTCGGCC	TTCATGGCCT	AGTTGGGGTT	AATTATGGCA	CCTAACTTAT	AGAAGAGGAA	60
ACCAATTTAG	AGACATTAAA	ATACTTGTTT	AAGGTTACAC	GGCAGGGAAA	AGGCAGAGTC	120
AGGATCTGTA	TTCTGTAGTC	TGAATCCAAA	GCGAATCCAA	AACTCTGAGG	TGCTNTGCTC	180
TGCTACCTGC	TGATGGTTCT	GCTGGGGGAT	GCTCAACCAC	CAGATGTCTT	ACTTGGGAAC	240
TGCACTGGAG	GTCGAGGGTC	TGCATTCTCC	TTCTGTCTGA	AAATCACAAC	GTCCCCATCT	300
TTCAAGCCAT	AAGAAGCCAA	TGATCTGTGG	TTGTCTGTGA	GAGGTCTTTC	CGCATAGACG	360
ATCTGGCTCT	CGGCTGCGGG	GATGCCAGAC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

TCAAAGGTCC	TTTGTGGAA	GCGGAGGTGC	CCGATGTTGA	TCTGGAGTGT	CCTGATGCAA	60
AGTTGAAAGG	GCCCAAGTTT	AAGATGCCTG	AGATGCACTT	CAAGGCCCCC	AAGATCTCCA	120
TGCCTGATGT	GGACTTACAC	CTGAAAGGCC	CCAAAGTCAA	AGGGGATGCG	GATGTGTCGG	180
TGCCAAAATT	GGAGGGAGAT	TTAACAGGCC	CCAGTGTGGG	TGTGGAGGTG	CCTGATGTTG	240
AGCTGGAGTG	TCCTGATGCA	AAGTTGAAAG	GCCCTTGTCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 718 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC	TTCATGGCCT	AAGCAGACGG	GCAGTAGGTC	CCAGAGTTAT	ACTTCGGAGC	60
ACATGTTCAA	GAGGGAAATG	ACGACCGGCC	CCCACGGTCC	TGGGATGCAG	GTGTGAGGAC	120
TGAGAAATGCT	GGACGGGGTG	TGGTCGAGGC	ATGGTCAGGG	TGGCCCCGAG	CTGTGCCCCA	180
CCCCAGGGAT	GCAGCAAGGG	TGCTCTGTGC	AGGACCCCGA	ACTTGGGCTC	TGCCCCATTT	240
CAGTGTCTGT	TGCATGTCAC	GCTGGCATCT	TCGGCATGTC	CACAGTTTGT	CACCCCCCAT	300
TTGGAGAAGC	TGCAGCGGAA	GATGGTTTCC	TCTGTGCCTT	GCAGGCAACG	TCATCCATCC	360
AGATCCTCCC	AGTGCCTTGC	CCGAATCGAN	CTGTGCGGTA	CACTCCTCCA	NACCGCGGAA	420
GCCGAGCATG	CGGCACACCA	CGTCTCCGTC	CTTCTTGTC	CAGCCGTCGT	CACACACAGT	480
GCCCCAGCGC	CGGTCGTGGT	ACACTTCCAC	GCGGCCCTCG	TGCGGACCTG	AGCCATTAC	540
CAGGCGGATC	ATCATCGGGG	CCTCCACGCC	ACTGGCATCC	CCAGCTCTGT	CTCCTTTCTC	600
TCCTTTCTCT	CCTTTTGGGC	CTCGGTCACC	TAAAACAGAG	GAGGAAACTG	GCATTAGAAA	660
TGGAAAGAAA	TCCTAATTGT	GAATAAAATA	TTACCTGCAG	GAGATTGATG	AACTCGAG	718

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC	TTCATGGCCT	AGCTGGGTTG	ACCCTGCAGA	GGCCAGAGAG	CCGAGGGGCC	60
ATGTGTGCTG	GATGGGGCT	CCCTGCCCTT	TTCTGAGGCT	CAGCACGGAG	GGGAGAAACC	120
CACATTTTCA	GAGGGAACCA	GCAGCAGAGC	AGAACCAGTA	ACCAAGATCC	CGGCAACCCC	180
TTGTGCTGAC	CCCACACACG	CTTCCCCTCT	TCCTGGCCAG	GCCACTCCAA	AGCTCTGTGC	240
ACACAGACAA	TAGACATCAG	GACTTTCATC	TTCATCGTC	ATCTGGCAGC	AGAGAGCCTG	300
CAGGGCTGGG	CTGCAGGGAG	AAGAGTTCCT	TTCCTCACGC	ATCCAGGCAA	GGGGAGAGCA	360
GCTCTGTGCC	TGCCACTGGC	CCACTCGAG				389

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC	TTCATGGCCT	ACACAAACAT	GATTTTATTT	TATTATTTTA	TTTTATTTTT	60
TTATTTTATT	TTGAGATGGA	GTCTCGCTCT	ATCGCCCAGG	CTGGAGTGTA	GTGGCATGAT	120
CTCGGCTCAC	TGCAAGCTCC	GCCTCCTGAG	GCGGGAGAAT	TCCTTGGGCC	TGGGAGGCGG	180
AGGTTGCGGT	GAGCTGAGAT	TGCCCCATTG	CACTCCAGCC	GAGGCAACAA	GAGCGAAACT	240
CCTTCTCAAA	AACAAACAAA	CAAACAACAA	CAACAACAAA	ACTCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC	TTCATGGCCT	AATGTGTTTT	ATGAACGATA	GATCACATCA	GAATCCTGT	60
GGGGAGGAAA	CCTTATAAAT	TAAACACATG	GCCCCCTTAG	AGACCACAGG	TGATGTCTGT	120
CTCCATCCTT	CCCTCTCCTT	TTCTGTCACC	TTTCCCCCTA	GCTGGCTCCT	TTGGACCTAC	180
CCCTGTCCTT	GCTGACTTGT	GTTGCATTGT	ATTCCAAACG	TGTTTACAGG	TTCTCTTAAG	240
CAATGTTGTA	TTTGCAGGCT	TTTCTGAATA	CCAAATCTGC	TTTTTGTAAG	GCGTAAAAAC	300
ATCACAAAGT	AGGTCATTCC	ATCACCACCC	TTGTCTCTCT	ACACATTTTG	CCTTTGGGGA	360
TCTGGTTGGG	GTTTTGGGTT	TTTTGTTGTT	GTTGTTTATT	TGTTATTTTA	AAGGTAAATT	420
GCACTTTTAA	AAAAATAATT	GGTTGACTTA	ATATATTTGC	TTTTTTTCTC	ACCTGCACTT	480
AGAGGAAATT	TGAACAAGTT	GGAAAAAAC	AATTTTTGTT	TCAATTCTAA	GAAACACTTG	540
CAGCTCTAGT	ATTCACTTGA	GTCTTCCTGT	TTTTCCTGTA	CCGGGTTATC	CTGCCTCGAG	600

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC	TTCATGGCCT	AGGAGGGCCA	CATCTGCCAN	AGCCTGGAGT	CTGCGAAGGC	60
CGGGACCCGG	TTCCCCGGCC	CACAGTGGGG	GTGTGCAAAC	CCGAGAGAAC	TGGGTTGCAA	120
ATTCTGTGAAG	AATCAGCATC	ATGTTTGGCA	GCTGAGTATT	GGAGCCAGGA	GCCTGCCATG	180
AGGTTTTGAG	AACAGAGTGC	TGTTTTAGAG	CTGGCAGCAG	CATCTCAGCC	CAAGAGAAGG	240
TTATATTCCC	AGAGGATGTC	AGTCCCAAGG	ACCAGTAGCT	GCCATCAGTT	TGGATTCTGA	300
AAACTAAGTG	GCATCAACAC	TGGGTGTAGA	AACATGCTTG	CCTTATGTAT	CAGAGGACAT	360
GCTCAGCAGA	TCCAAGAGAT	ATATTTGGCA	ACTTTTCTA	GAAAAGGCAC	CTGCCTCGAG	420

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 602 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC	TTCATGGCCT	ACCACCCGCG	ACAGTTTCCC	AGCAGGGCTC	ACAGCAGCGT	60
TCCGCGTCAT	GGGGATTTGG	CAGCGTCTGC	TGCTTTTGG	TGGGGTGTGC	CTCCGGGCTG	120
GTGGCGGGGC	CACTGCCCCG	CTTGGGGGAA	GCCGAGCGAT	GGTTTGTGGG	CGCCAGTTGT	180
CTGGCGCCCG	GAGTGAGACC	CTAAAACAAA	GAAGAACACA	AATCATGTCC	CGAGGACTTC	240
CAAAGCAGAA	ACCGATAGAA	GGTGTTAAAC	AAGTTATAGT	TGTGGCTTCT	GGAAAGGGTG	300
GAGTCGGAAA	ATCTACTACA	GCAGTGAATC	TTGCACTTGC	ACTAGCAGCG	AACGATTTCG	360
CCAAGGCCAT	TGGTTTGCTA	GATGTGGATG	TGTATGGACC	TTCAGTTCCA	AAGATGATGA	420
ATCTGAAAGG	AAATCCGGAA	TTATCACAGA	GCAACCTAAT	GAGGCCTCTC	TTGAATTATG	480
GTATTGCTTG	TATGTCTATG	GGCTTTCTGG	TTGAAGAAAG	TGAACCAGTA	GTTTGGAGAG	540
GCCTTATGGT	AATGTCGGCC	ATTGAGAAAT	TGTTGAGGCA	GGTAGATTGG	GGTCCACTCG	600
AG						602

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC	TTCATGGCCT	ACTANACCTG	CCTCGTAGTC	CAGAAAGATC	CCCACGCGCC	60
TGGGTGGGTC	CCGGAGTGGA	GCCAAGGCCC	GTTCCGAGGA	NTTGTAATAG	CTCCCCAGGA	120
AGACCAGGAT	CCAGAAGCCG	TTGCCCGCGN	ANAGCTCGCC	CTTCTCCTTC	CTGTTACGCT	180
TCTCCCTGCA	CACCCCCAGG	GCCCAGCTGG	TGCGGTCCCC	AACCTCCACC	TCCCAGTAGT	240
GGCGGCTGAG	GTGAAGCGCT	CCTGGCCCGA	CACGCAGGGG	CCGGGGTCAA	AGCGCTCTGG	300
GCTGTCCGGC	ANGGCCTGCC	GTANGTCCCC	CCGCTGCACG	CGTCCGCCTG	TCTTCAGACA	360
GGATCAGCTC	AGGGTTGGCG	GTGTCCGGGT	CCAAGGTCAC	GTCCCCTCGA	AACCTCCGCA	420
GTGTTTNTAC	CAGTCCCAGG	ACCCTGCACA	CGGTCCTCAG	CTCCATAGGC	ACAACTTNTG	480
GGGGCTGCAG	CTTCACATCC	TGGACCCTGC	NCAGGGCGTC	CTTGATGTCC	TGCAGCAGCC	540
CCAGAGCAGG	CAGCTGGCAG	CGGCCCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:1234:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 631 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

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GAATTCGGCC TTCATGGCCT ACTTAATT TAAGTCTTTT CTTGTGAAAT GATCATTGAA      60
GTAGTTACTA ACAGGTAATG AAATAAAATA CCAATTTTGC TAGTGAAAAA TAGTTTTC AA      120
CTGAGAAAAG CACTTGGCAG AAGACCTACA AACATGCAGG CTAATGCTAC ACTCTATTGC      180
AGCTTCAAAT AAGTTGTTTT TGATGCCTTT TGAGAAGAAC AAATAAGAT GAAAATAATT      240
CCTTGAACAT TTATCAGCAT TGCTGTTTAG GTACCCATTA GAAAGTGATT AACATTGAT      300
ACCTACCCTT TCCAAAACAC AAAATCACTG GCAAGCATCA TCACACACTC CTAAACCAGC      360
AACATCTGAG AAGCACAAAA CACCTTCCCT TTTGTCTAAT AACCTGTTGG TTAGTTATTG      420
GAACTGCAAG GCTTACAAAC TCCTCCCCTG TCCTTTATCC TTATGTAAGC TTGCACATTC      480
TCCAGGAATA GCTATTTTCA AAGGTAATTT CAAAAGAATT AATACAATGA ATTCTACTGG      540
GCAGTTTGGG GGAAAATATT GACGATATTA AAATTTAAAA AATGCCTGCC TGACACATAT      600
AAGGCCTCCC CAGTCCCTCA TACAACCTCGA G                                     631

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(2) INFORMATION FOR SEQ ID NO:1235:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

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GAATTCGGCC TTCGTGGCCT AAGGACAGTG TATAAAAAGG CAGCGTCACA CAGGTGGGCT      60
CTGGGGTCCT TGGTCCATTA GGAGATGGCC TTTGCCTCAG GAAGGAAGGC TTCCAGTAC      120
TTTGCCAGCT GCTGCTGTGA GTAAAGGAGT GTCTCAAGGT ACTTGATGAC GTGGTCTTG      180
AAGTCCTTGG ATTTCTCTTT CTCAAACCGT ATCACTTCTT TTCGGACCAC TGTTGAAATC      240
CTCTCGAAGT CCCTTTCATA TTGAGTCACC CGAGAGTCCC ACTCGAG                                     287

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(2) INFORMATION FOR SEQ ID NO:1236:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 537 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

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GAATTCGGCC TTCATGGCCT AGGCTGGCGG GGTAGGGGTT GGTGGTAAG GCTTGAGCAG      60
AAGTTCTAG ATGCATTGAG GAGATAAAGA TGCATTTGGG GTTATTGCAC TTCTCCTAGA      120
AACATAAACA TTGACTTCCT TTTGTGGAAG AAAAATGTTA TGTTAGCTAT TTGACGTTTC      180
AGGAAGGGTG GCTTCAGCTT GGNATTTGGG GATGTTTGTG TACANGTGGC CAGGCTGCTT      240
TCTGGCTTGG AAGACTATTG TTTCTTGGGA ATTGTCTGTA TCAGACATCA TGGGAGCAGA      300

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TCCAGGGCGA	CATCAAAGGG	AACATGATTN	NCNNAGGACC	AGAGGGGCTT	GGATGCAGAT	360
GATCATCATC	TGGGCACTGN	TGGATACTGA	GTAAGCCCCA	GCTGCACCCC	ACCTCTGCGC	420
TCTGAGCATG	GGAGGCAGCC	TGTGCAGCTA	TAAGTCAGCC	TGACTTTTTT	CTTCCCTGCA	480
TACTCTTGAA	ATACACTGGA	GATGAGTAGG	GGCGAGTGAG	CTGCACACCA	GAATAAG	537

(2) INFORMATION FOR SEQ ID NO:1237:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC	TTCATGGCCT	ATCTCCANAT	AATTTNGATC	ATAGGCCGGA	GTGAGTCATT	60
CCACCTGCAC	CTTTCTGTAC	AAATACTAAT	TCAATTTTAA	GTCTTAAGTC	ACTTTTAA	120
TATATATGAT	CTTCTGCTCT	TCCCACTTCC	TCCCNNTCT	ACTGCTCTCC	CATTTTCCCT	180
TGCTGGGAGT	AGCCACATGC	TTTTTGCCCC	CCAACCCTTG	TATATGGGGA	CAGTGGGGTC	240
AGTGCAGCTA	CCCTTTCTTT	CCCTCCTGCG	GAACAGCGGA	CCCAGCAAGA	GCATCCACAT	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:1238:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCGCCT	TCATGGCCTA	ATTTATGCC	CCATATTTGG	CATATAGTGG	AAGGAGAAAG	60
GATGATTTTT	TGCAGTATTT	AATAACATTG	AGCCTTGAAG	CTGTTTGGCA	AAAGGTAAGT	120
TTCCTTTGTG	GCTTTGCTGA	AAAACAAGGC	ATAGATTTAC	ATAGATACGT	GTTTAATTCT	180
CTGCTTCACT	AAAGAAAGCA	AATGCCTATT	AAGCCACTTC	AGTTGGGATA	ATCCCTGATT	240
ATTGTGAGAT	TGAAATTACT	TTGTCAATTT	TACAAATAGT	TTTTATCTTT	CCATTTACAT	300
ATTTACCATG	ACAACCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:1239:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGCC	TTCATGCCTA	CAGCGATGAG	TGCACGAGTG	AGATCAAGAT	CCAGAGGAAG	60
AGGAGATGGT	CAGGAGGCTC	CCGATGTGGT	TGCATTCGTG	GCTCCCGGTG	AATCTCAGCA	120
AGAGGAACCA	CCAAGTACA	ATCAGGATAT	TGAACCTGGA	CAAGAGAGAG	AAGGAACACC	180
TCCGATCGAA	GAACGTAAAG	TAGAAGGTGA	TTGCCAGGAA	ATGGATCTGG	AAAAGACTCG	240

GAGTGAGCGT GGAGATGGCT CTGATGTAAA AGAGAAGACT CCACCTAATC CTAAGCATGC 300
 TAAGACTAAA GAAGCAGGAA GACTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1240:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GGGGATCCTT TTATTTTAAT CACAAAAATG CTGAAAATTT TGGGTTGCAA TTTCAATCCA 60
 CAGTAAAGCA TGGGCATTTT TTTTTTTTTT TTAAATCAGA GTGAAGTGCC TCGCGTCTTT 120
 CTTTTTAAGG GTTACACTGT ATGTGTTCTG TGTTTTATTT AACTGTTCCC CTCCTGAGGG 180
 GCATTCCGCT TGTGTGAGCT TTCTCCCTC TTGCTGACAG TGCTGCAGTA ATCATTCTTG 240
 TCCATTTTAA TCCCTATGTA TTTACACGGT ATTCTCGAG 279

(2) INFORMATION FOR SEQ ID NO:1241:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCGGCC TTCATGGCCT ACGGAAAAGG AAACCTTGGT GGGATTGCTG TGGATGACAT 60
 TAGTATTAAT AACCACATTT CACAAGAAGA TTGTGCAAAA CCAGCAGACC TGGATAAAAA 120
 GAACCCAGAA ATTAAAATTG ATGAAACAGG GAGCACGCCA GGATACGAAG GTGAAGGAGA 180
 AGGTGACAAG AACATCTCCA GGAAGCCAGG CAATGTGTTG AAGACCTTAG ACCCCATCCT 240
 CATCACCATC ATAGCCATGA GTGCCCTGGG GGTCTCCTG GGGGCTGTCT GTGGGGTCGT 300
 GCTGTACTGT GCCTGTTGGC ATAATGGGAT GTCAGAAAGA AACTTGTCTG CCCTGGAGAA 360
 CTATAACTTT GAACTTGTGG ATGGTGTGAA GTTGAAAAAA GACAAACTGA ATACACAGAG 420
 TACTTATTCG GAGAGCATTC TCGAG 445

(2) INFORMATION FOR SEQ ID NO:1242:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCGGCC TTCATGGCCT AATCATGCCT CCTGCTTTTG TCACCTAATA CGTGACAGAC 60
 TTCTTGCCAT ATGTGGAAAT AGATAACTCT TTCACTATTC TTAATAATGG ATATTTAGAT 120
 GGCTTCCATT TGTCCTGTT ATTGTTGTAA CATATATTCT TGCATACATT TCCTTTTATA 180
 CTTACTCAAT TATTAGCTGA ACTTTGGAGT AAAATCACTA AGTAAATACG TTTTAGGCTT 240
 TTGCTATGTG TTACAAGATT TCCTGTCAGC AATTTAAGAT ACTTTTATTG CTCCTCACAG 300

CCTTGCCAGA ACTCATTGGG ACACTCGAG

329

(2) INFORMATION FOR SEQ ID NO:1243:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	TTCATGGCCT	AAAAATAGTA	AATTCCCAGA	AATTCAGTGT	TTAGACGAGG	60
GAATTTAATT	CCTATTTTGT	CCATGTTGGT	GATGTACTGT	ACTTCCCTTC	CTTTTCTCTG	120
CATCCCCCAT	CACCTCATAG	AAGACTCTTT	GTTGATCATT	GTATGTTAAT	AATGTATAAA	180
ATGGCTATCT	TGTAAGCGTG	CTGTCCTGGT	ACTAGTGTAG	CGACTTTTTT	TCTCCTCTTT	240
CTTCTAGTAC	ATATTGATAG	GTATAACATA	ATTAAGGTTT	AAAAAAAATT	AGACATAGTT	300
ATTCAGATT	AGGACCAGTA	AGGATAGAAC	TTTCTCTTAT	TTATGAAAAA	AAATGCTAAT	360
AATTTTGGGG	CAGTTTTTTC	CTTTAATTAT	TTTTTTCAAT	TTCAAGTTTA	ATTTTATTTT	420
AGCTGATCTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:1244:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	TTCATGGCCT	ACATGACTGA	GTATATTACC	TCTGTTTGAG	AGAGAACCAT	60
TTTCTTCAGA	AATTCATATC	CTACCGTTCT	GCTGTTTTTC	ATGATAATTG	TTTTTCTCCT	120
AACATTATAT	TTCTGTCTTT	TAGATTTTAG	TATTTACCTT	TTTAGAATAA	ATTTTGATAG	180
ATGAAGTTGT	TTTTCTTATT	TCTCCTACCC	CCTTTCCTTC	ATCTCAGACA	TTATTTCCCA	240
GCTTTCCTTG	TTTCAGCTTT	TTATTATGAA	AAATGTCAAA	TGTGCAGAAA	AATGGAAAGA	300
ACAGTACAAC	ACACCCCCAA	TCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:1245:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 397 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	TTCATGGCCT	ACTGAGAATC	TTCACCATTA	AACCTAGGAG	TGTTCTACAA	60
AATAGTGCCT	AGAACAGCTA	TTGATACTCA	AGAGGGCTGT	TTAAGTAGCT	AGAAAAGTCT	120
AACCTAAAAT	CCCATTGTG	ATTAGATTAT	GCACTGATGA	AAAAATGTTT	AATGCCGTTA	180
AAAAGAATCT	ATTACATTAT	ATTCTTTCAG	GCCATGGTAA	AGTTACAAAT	TTGAAGTCAA	240
TAGGCTGTGT	GTGTATTGT	ATGTGTGTAT	TTTTCTTTCT	TTTATTGGCA	GTCTCAATAA	300

TTGTTAAGCC ACACACTGCA CAGTATACAC ACACACTGCA CACCACACAC ACACCACAGA 360
 NTGCACACCA CACACAGCAC AACCACCCAC ACTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1246:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 440 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

GAATTCGGCC TTCATGGCCT AGTGGGCAGA TCACCTGAAG TCAGGAGTTT GAGAACAACC 60
 TGGCCAACAT GGTGAAACCC TGTCTCTACA AAAAATAAAA AAATTAGCCA GGGGTGAGGG 120
 CAGGTGCCCTG TAGTCTTAGC TACTTAGGAG GCTGAGGCGG GAGAATCACT GGAACCCACG 180
 GGGCGGAGGT TGCAGTGAGC CGAGATCACA CCAGTGCCT CCACCCTGGG CGATAGAATG 240
 GGACTTTTTTA AAAAAAAAAA AAACGCCTCA CACGGTTTTA GGTGCTATTA ATACAGTAAG 300
 AAACAAATAA ACAAAGCTCA TTGCCCTTGA TGGACTTTAA AAAATGATCC AAGTATATGC 360
 TGTCTGTAAG AGATACACCC TAGACTCAAA GACACAAATA AGCAAATCAA AGGATGAAAA 420
 AGATACACTA TATGCTCGAG 440

(2) INFORMATION FOR SEQ ID NO:1247:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

GAATTCGCCT TTNATGGCCT AGCCNAACAA AATGGCGGCG GCAGCGGTGT CGTTTTGTTT 60
 CCGGGGNTCC TGCGGCGGTG GCAGTGGTAG CGCCCTTTGA GCTGTGGGGA GGTTCAGCA 120
 GCAGCTACAG TGACGACTAA GACTCCAGTG CATTCTATC GTAACCGGGC GCGGGGGAGC 180
 GCAGATCGGC GCCCAGCAAT CACAGAAGCC GACAAGGCGT TCAAGCGAAA ACATGACCGC 240
 TGAGCCCATG AGTGAAAGCA AGTTGAATAC ATTGGTGCAG AAGCTTCATG ACTTCCTTGC 300
 AACTCATCA GAAGAATTG AAGAAACAAG TTTTCCTCCA CGACTTGCAA TGAATCAAAA 360
 CACAGGTAAA TTGAAAAAGA ATGTGCTATA CCTTCTAGTC TTTTCTAT TTTTCTTAA 420
 CACTTATGGA GGTAACCATT TATTTTATTC AGAGAGCACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:1248:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 194 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

TTTTGTTTTG TTTGTTTTG TTTTGGTAG AGTTGGAGTC TTGCTGTGTT GCCCAAGCTG 60
 ATCTCCAATT CCTGACCTCA AACAGGTCTC TCACCTTGGC CTCCCAAAGT GCTGGGAATT 120

CAGGGGTGAA CCACCTCACC CAGCCAAGAT CACATTTTGA ATCTAATTTT TTTTTTTTGA 180
AACAGTGTCT CGAG 194

(2) INFORMATION FOR SEQ ID NO:1249:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 523 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

GAATTCGGCC TTCATGGCCT ACCTGTGCAA GAACATGAAA CATCTGTGGT TCTTCCTTCT 60
 CCTGGTGGCA GCTCAGAT GGGTCCTGTC CCAGGTGCAG CTGCAGGAGT CGGGCCCAGG 120
 ACTGGTGAAG CCTTCGGAGA CCCTGTCCCT CACTTGCACT GTCTCTGGTG GCTCCATCAG 180
 TGATCACTTC TGGACCTGGA TCCGGCAGCC CCCAGGGAGG ACGCTGGAGT CGCTTGCTA 240
 TATTCATTAC AGTGGGATCA CCAACTACAA CCCCTCCCTC AAGAGTCGGG TCACCTTTTC 300
 AGTAGACACG TCCAAGAACC AGCTCTCCCT GAAGCTGAAG ACTGTGACCG CTGCGGACAC 360
 GGCCGTGTAT TACTGTGCGA GATTAGTGG TTATTATACT AACCTTCCT ACTACTACTA 420
 CATGGACGTC TGGGGCAAAG GGACCACGGT CACCGTCTCC TCAGCCTCCA CCAAGGGCCC 480
 ATCGTCTTC CCCCTGGCAC CCTCTCCAA GAGCACTCTC GAG 523

(2) INFORMATION FOR SEQ ID NO:1250:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 194 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

GCCAGAGGGA TGACCGGTGG CTGCTGGTGG CACTCCTGGT GCCAACGTGT GTCTTTTGG 60
 TGGTCCTGCT TGCACTGGGC ATCGTGACT GCACCCGCTG TGGCCCCCAT GCACCCAACA 120
 AGCGCATCAC TGACTGCTAT CGCTGGGTCA TCCATGCTGG GAGCAAGAGC CCAACAGAAC 180
 CCATACCCCT CGAG 194

(2) INFORMATION FOR SEQ ID NO:1251:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 503 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

GAATTCGGCC TTCATGGCCT AAGCCCACTG GCATCAGACA TGCTTTGCTG TAGTGTACAC 60
 TTCNTTTTTC NTTTTNTTT TTTTTTTTN CACACAGAGC CNGGNTCCGT CCCCCAGGCC 120
 TGACTGCAGC GGNANAATCC CACCCACNG CCACNTCCGC CACCCAGGCC CAAGCGGTTC 180
 CCTAACGGCT AATGATGTTG AACATCTCTT CATGGGGTTA CATGCCATCT TTATATCCTC 240
 TTCAGTGAAA TGTTCTTAA CATCTTTTGC TGTTTCTAA TTGGATTACT TGGGTTTTT 300

TAATACTGAG	TTTGGAGTTA	TTTATATATT	CTAGACAGTA	GTCTTTATTG	GATATGTGGT	360
TCAAAAATAT	TTTCTCCAG	TCTGTAGTTT	GCCTTTTCAG	CCTTTTAACA	TGGTCTTTAG	420
CAGACCAAAA	TGTTTTAGTT	CTTATGAAGT	CCAACCTACC	AATTTTTCCT	TTTCTAGATC	480
ATACTTTTGG	TGTCAAGTCT	CAG				503

(2) INFORMATION FOR SEQ ID NO:1252:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 589 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

GAATTCGGGC	TTCATGGCCT	AATTGAATTC	ATGATTTGTC	TCTCTGCTTG	CCTGTTGTTG	60
GTGTATAGGA	ATGCTAGCAA	TCTTTGCACA	TTCATTTTAT	ATCCTGGGTT	TCAGTATTTT	120
AAAAACTTAC	TTCAGGTGAT	TCTATGTGTG	CAACCATGAT	TGAGATACAC	TGTTATAGAA	180
TCTAGGATGT	GATAAACTAG	AAGAACATAA	CTAAAGTTTT	GCATTTTTCG	GGTGTCTCAG	240
TTTCCTCATT	TATAGATGGA	GTTGGTATGT	GTACCAAGTT	CATAGGCTTG	TTCTGAGTAA	300
ATTAGTGCA	GTAAAGTGCT	CCACAGAATG	TTAGCTGTTG	TGATGCTTTA	CTTCCATTG	360
CACCTTCCTGA	CTCCTAGCCT	TTCTTTTCCT	TGGCTCTTTT	TATGCTCATG	TCAGATGCCT	420
CTATTGTTTC	TTTCCCCCA	GAATATCCTC	CACTTTATCT	TGCTCTGCTC	AACATCTTTA	480
AAGTATAGAA	TCAACAGACT	GCCATGCCAC	CCAGTCTGTC	TGACAATTGA	GGCAAATTCC	540
CTAAGTCCTC	TTGTTCTCCT	TCTGAGATTT	CCACCTGCTC	TAACTCGAG		589

(2) INFORMATION FOR SEQ ID NO:1253:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 702 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

GAATTCGGCC	TTCATGGCCT	ACATTTATCG	AGTCTTTAAT	TAATGCCCTG	GGTAACTATA	60
AGGTTGGAAC	TGTAATTGTC	ACCATATTGA	TGATGAGAAA	CTTGAGAAAG	GATAAGTGAC	120
TTGTCTAAAA	TCACACAGTA	AAACCTCAAA	TCAAACCCAG	GCCCTCTGGC	TCCAGACTCT	180
AAATTATACT	CTGAATGATA	CTCACTGATT	GTCCGAGGAC	ACAAAGACTG	TCGAGGCACT	240
ATCTGCTGGG	TGTCTGCAGA	ACCTTACTGT	TCTAAAGCAA	AACATTTTAC	CCCTGGACAA	300
GAGCAGCAAA	GGTGGCGTTC	GGCCCTCCTT	GGCTCTCATT	TGACTGTTCA	AAGCCAGGTG	360
CTTTTCTTTC	TTGGGTCAGA	ACGTATTTTC	AGCAGCATTT	TGAAGCACCC	CTGGCGTGCA	420
CTGCACAGGG	AAACCAGGAC	CACATTGGTG	TGCTGTGTCC	TCCTTACCAA	CTGGCTCTTG	480
GAGAAGGTGA	GACAGAAGTA	GCTGAGACTC	CATTCTGAG	ATCTTCACTT	AACAACCTCCT	540
GCAGCTTGTC	CAGAGCCTTA	CTAGAAATAC	TGAAGGCAGA	AGTCCCTGGA	AAATAGGGCC	600
CATAACTAAT	TAGTAATTTG	TTTTTGAGTA	ATTTCTTACC	GTTATTTGAG	CACATTCTGC	660
AGTCCAGGCA	TTTTGCTAAA	CTCTTACATG	GCAGGACTCG	AG		702

(2) INFORMATION FOR SEQ ID NO:1254:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 554 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTCGGCC	TTCATGGCCT	AAGCAAGTAA	ACACTGTATA	TCTGTAATTG	GAAAGTTGGT	60
GGGAAGATTA	CTTTTCCATT	CTTGATGTGG	CAGCCTTAAG	TGCCATCACA	GCTTGTTCTG	120
TGGTTTGCTT	TTTTTTTGGC	AGTGACCTCA	GCTCACTGCA	ACCTCCACCT	CCCTGGTTCA	180
AGCAATTCCT	CTTCTTCAGC	CTCCCAAGTA	GCTGGGATTT	CTGGTGCATG	CTACCAGGCC	240
TGGCTAATTT	TTTTTTGTAT	TTTAGTATA	GACAGGGTTT	CATCATGTTG	GCCAGACTGG	300
CCTCAAATCT	CTGACCTCAG	GCAATCTGCC	CACCTCAGCC	TCCCAAAGTG	CTGGGATTAT	360
AGGTGTGAGC	CACTGCGCCC	AGCCGACTTT	CAAATTTTTT	AACCACAGCC	CAGTGTAAAC	420
CTGTGTGTAT	GTGTGTGAGT	GTGCTTGAT	GTGTGTTTGA	AATAAAATTT	TTCATGTGCT	480
TAAACATTCT	GATTTTTTTT	TTATCAGAAC	CACATAATGAG	ATGAGACCAT	AGTTTGTAAC	540
ACCTCATGCT	CGAG					554

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC	TTCATGGCCT	AGCTCCGGCA	CATGGCAGGC	ACTCAGGGAA	AGTATGTAGC	60
CTTATGAAC	GACTGATCTG	AGGGAGGCAC	TTCTGTAAGC	CATAGTATTG	GTCAGTGGCA	120
TGAGGCCACC	TACTGGATCC	CTGCCATCCA	GCCCTGGGAG	TAGCATGAAG	CAGCATGGCA	180
CTGGCCTTCT	GGAAGCTTGG	AGAGGAGTCT	TACCCAAGCT	TTGCTCCTAG	ACATTAAACT	240
TCCCAGCTGG	GCACTAACAT	GTGGCTGCAG	AACCTGCCCT	TGCTCAGTCT	GTCCCTGGTG	300
CAGCTGCTGG	GAGAGCCTGC	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC	TTCATGGCCT	ACATTAAGGC	AGCTTTGTAA	GTAAGTACAA	AATATATTTT	60
AACCTACACA	ATTTTTATTA	GTTTCCCTCT	CTTTTAGAAG	TACACCGACT	CTAAAATGAA	120
TGAAAGTCTG	ATTACTTGCC	TAGGTTGGG	GGCTTTATCC	AAGCTCTACT	AAGTGAAGCT	180
AAAATAAAGG	ACATTGTTGT	ATATTGTATT	TTAATGTATA	CATTATTACC	TCCTCAGCAA	240
AGTGAAACAT	AGCTAAACT	TGAGTATATA	TTTCTTTCAT	TTCTCTTCTT	AGTTCCTTTT	300
TGGCATCTCA	TGCTGAACAA	ATCCAAAATA	GATTTATTAA	TGCCTTCCCC	CAACACAAAC	360
AAAACCAGAA	GAGTCTTTTC	CTTCTAGACC	TGCCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC	TTCATGGCCT	ACTGAGTACA	GGTTTGGGAT	CTACATACCC	AGATCAACAG	60
CATGTGGCAT	CACCTGGCCC	AGGTGAGCAT	GACCAGGTAT	ACCCAGATGC	AGCTCAGCAT	120
GGCCATGCTT	TCTCTCTCTT	TGACAGTCAT	GATTCAATGT	ATCCTGGTTA	TCGTGGCCCA	180
GGGTATCTAA	GTGCTGATCA	GCATGGCCAG	GAAGGTTTGG	ATCCAAATAG	AACACGAGCC	240
TCGGACCGAC	GTGGAATTCC	TGCCCAGAAG	GCCCCAGGCC	AAGATGTCAC	TCTTTTCAGG	300
AGTCCAGACT	CCGTCGACCG	AGTCTTATCA	GAAGGGAGCG	AAGTCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 335 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCGGCC	TTCATGGCCT	AATTGAATCG	AGCTGGTTAA	GTTTCACTAG	GAGGCGCNAA	60
AAAGGAGCCG	TTTTTGACTT	AACATTTTAA	TTCTAGTAGA	GATAAGAAGA	GCTTGTGTGG	120
GCTTACAGTC	CTTCACCTGA	CTGTCCTTCA	CCAGTGAGTA	GCATACCAGT	TCTTCAAATG	180
TCCTATACTT	TGGAAAGCAG	ACCCGACTCT	GGAGCACTCG	CCTTAATTAG	ATTCTGAATT	240
TCCTTGAATT	TTGGATGGTC	CTTATCAGCT	ACCAGCTGAA	GCAGAACAGC	CTCACTCGTG	300
GTCACTATGA	TCCCGGTTTC	AGCGAGACGC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 621 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

TCCAGTTGAA	TTTAATAGAA	TTCGGCCTTC	ATGGCCTAGC	CGACCGTTGA	CTATTCTCTA	60
CAAACCACAA	AGACATTGGA	AACTATATCC	TATTATTCGG	CGCATGAGCT	GGAGTCCTAG	120
GCACAGCTCT	AAGCCTCCTT	ATTCGAGCCG	AGCTGGGCCA	GCCAGGCAAC	CTTCTAGGTA	180
ACGACCACAT	CTACAACGTT	ATCGTCACAG	CCCATGCATT	TGTAATAATC	TTCTTCATAG	240
TAATACCCAT	CATAATCGGA	GGCTTTGGCA	ACTGACTAGT	TCCCCTAATA	ATCGGTGCCC	300
CCGATATGGC	GTTTCCCCGC	TGCATGCTAG	TTATATTCT	CCAACATAGA	TTAAATACAT	360
ACATGACTAT	TAAATCTCA	GGGTTCTTCT	ATGTGTCCCC	TAAAAGCATG	ATGTATGCCA	420
GTGGTCATCT	GTCCACCACC	ATTTGGGGAC	CACGGCATT	AGGTAAAGTG	GGTCTCGGAT	480
GACCTCCTTC	AGCTTAACAG	CAGGAGTTGA	GATGGAGCCC	TTGCAATTTT	CCCACTGAAT	540
TCCAGAAGCA	AGGAGAAAGA	CTGAAGTGAC	AAGTACCGCA	AGACAGACTT	CAGGAACAAT	600
TCGTTTAAGC	TGCAGCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:1260:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GTTTTGTGAT TCTCCAGGAC AGATGATGAA AAACAGTGTA GATAGTGTC AAAATTCCAC	60
TGTAGCCATA AAATCTCGAC CTGTTTCAAG AGTTACCAAT GGAACCTCCA ATAAAAAAG	120
TATTCATGAA CAAGACACTA ATGTAAATAA CAGTGTACTA AAGAAAGTCA GTGGCAAAGG	180
ATGTAGTGAG CCAGTACCAC AGGCAATTTT GAAGAAAAGA GGAAGTAGCA ATGGATGTAC	240
TGCAGCTCAG CAGAGGACAA AGAGTACCCC ATCTAATCTT ACTAAACTC AAGGATCCCA	300
AGGAGAGTCA CCAATACTCG AG	322

(2) INFORMATION FOR SEQ ID NO:1261:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GCCCTCATGA CTCGGATCCA ACCTGCCTCG CAGGGAGTCG AGCTCTCCGG CCTCTCAGCC	60
GCCATCAGCC ACTTCCTGAA CTGCTTCCTG AGCTCCTACC CAAACCCCGT GGCCACCTG	120
CCCGCCGACG AGCTGGTCTC CAAGAAGCGG AATAAGAGGA GGAAAAACCG GCCCCCGGGG	180
GCTGCAGATA ACACAGCCTG GGCTGTCATG ACCCCCCAGG AGCTCTGGAA GAACATCTGC	240
CAGGAGGCCA AGAACTACTT TGACTTCGAC CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1262:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GAATTCGGCC TTCATGGCCT ACAAAGAAAG CAAGCCACAA ACAATAATGA AGCAAAAAAT	60
GGAATCTAAG AATCTTTTTG TATGGAATAT TACTTCTATC AGAAGATGAT CAAGATGTTT	120
CAGTCCAGTG CACATCAGCA TTGCTGACAT TTTATGGATT CTAAACTTGT GTTGTCTTCT	180
TTTTAAATCA ACTTTTTTAAA AAAATAAAGT GTAAATTAAC CGACTAGAGT ACTTGAAAAA	240
TGTGATCAGT ACAAGTGAAC TTAGGTTGTT GCCAACAGGG TCCGTACTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1263:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 439 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

```

GCGATTGAAT TCTAGACCTG CCTTGATGCC AACTAAGGAA ATTTGTTTAG CATTGAATCT      60
CTGAAGGCTC TATGAAAGGA ATAGCATGAT GTGCTGTTAG AATCAGATGT TACTGCTAAA      120
ATTACATGT TGTGATGTAA ATTGTGTAGA AAACCATTAA ATCATTCAAA ATAATAAACT      180
ATTTTATTA GAGAATGTAT ACTTTTAGAA AGCTGTCTCC TTATTTAAAT AAAATAGTGT      240
TTGTCTGTAG TTCAGTGTTG GGGCAATCTT GGGGGGGATT CTTCTCTAAT CTTTCAGAAA      300
CTTGTCTGC GAACACTCTT TAATGGACCA GATCAGGATT TGAGCGGAAG AACGAATGTA      360
ACTTTAAGGC AGGAAAGACA AATTTTATTC TTCATAAAGT GATGAGCATA TAATAATTCC      420
AGGCAAATGG CAACTCGAG                                     439

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(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AGGGGAGGCC GCGGNGGGGA AAATGGCGGA CGGGAAGGCG      60
GGAGACGAGA AGCCTGAAAA GTCGCAGCGA GCTGGAGCCG CCGGAGGTGA ACACAACCCC      120
AGCGTCGTGG GCAGCGTGGG ATGCTCCGGG CTTTCTTTG AGCTCCCAAG GTGGGGGGAG      180
TGGGGTGGGG CGAAAATGGG CGGATCTGGA CCTCACCCGG ACAGGTGTTG GGCCCAAGACC      240
TGCCTCCGGG CNGCCCCGA TCGGCCCTC CTGGGCTCCG GGCCTACATC GCCTCCTTGC      300
CTGGGGAGAG CCGGCCACTG TTCGTACCT CTTGGCCCA GCGGAGGCC TGATTCGAG      360
GAGAAGGGAG ATGGGCGCCA GAAAGGGAGA CCGAACTCGG GGTGGGACCA GGAGCGGCGG      420
TGCAGGAGCC GCTACCGCCA CACCGGAGAC GCACATCACA CAAAACACAC ACACCGGATT      480
CTCGAG                                     486

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(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC AAAGAGGCCT AATTATTGT TGGATCAATC AAAATTTTCA TCACTTAAAA      60
GAACCATGTC TATTAAAGAA TTAGCTCAC TGGAGTGCAT TGCCATTCCA AAAAAGAAGA      120
TGAATTTAAA AGATAAAGC CATGAAGGTG TTGCTGTGT CCAGAAAGAA AAATCAGTAG      180
TTAAAACCTG GTTCTGTGAA TGCAATCAGC GATTCCCAAG TGAAGATGCA GTAGAAAAGC      240
ATGTTTTCTC AGCAAACACA ATGGGTTATA AATGTGTGGT CTGTGGAAAG GTATGTGATG      300
ATTGAGGGGT TCTCGAG                                     317

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(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC AAAGAGGCCT AATCTTTTCC TTTCTTGTA GTTAGAAGAA ATAACCTCTT      60
CAGTTAAACC TTCAGTGAAG GTTCTTTTAG TTTTCTGTTC TGCTTTCTAA AAACATAGAC      120
TCTGTTCTTT AGAGCAACTT ATGACTCTCA TCTCTGCTGC ACGAGAATAT GAGATAGAGT      180
TCATCTATGC GATCTCACCT GGATTGGATA TCACTTTTTT TAACCCCAAG GAAGTATCCA      240
CATTGAAACG TAAATTGGAC CAGGTAAGTC CTTACTTTTT ATTCAATTTT CCTGACTATG      300
TACTTGAAAC TAGAAGTTTA CTCAGTTGCT TTTACGATGT TAAAAGGAAA TCAAATTCCT      360
ATTTCTTTGT TTTCTTTTTT TGTGTTGTTG TTTGTTTTT TGAGACAGAG TCTTGCTCTG      420
CACTCCAGCC TTGGGCAACA GAGCAAGGCT CTCAAAATAA AAAAGCAGCG ACACTCGAG      479

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(2) INFORMATION FOR SEQ ID NO:1267:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 615 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTATG CCAACAAAAG GAGAGGGAGC CATAGGTTCT      60
CTAGATAACA CTCCTGAGGA AAGAAGAGCA CTTGCCAAAA AATCACAAGA TTTCTGTTGT      120
GAAGGATGTG GCTCTGCCAT GAAGGATGTC CTGTGCGCTT TAAAATCTGG AAGCGATTCA      180
AGCCAAGCTG ACCAAGAAGC CANAGAAGTC GCTAGGCAAA TAAGCTTTAA GGCAGAAGTC      240
AATTCATCTG GAAACACTAT CTCTGAGTCA GACTTAAACC ACTCTTTTTC ACTAACTGAT      300
TTACAAGATG ATATACCTAC AACATTCCAG GGTGCTACGG CCAGTACATC GTACGGACTC      360
CAGAATTCCT CAGCAGCATC CTTTCATCAA CCTACCCAAC CTGTAGCTAA GAATACCTCC      420
ATGAGCCCTC GACAGCGCCG GGCCCAGCAG CAGAGTCAGA GAAGGTTGTC TACTTCACCA      480
GATGTAATCC AGGGCCACCA GCCAAGAGAC AACCACACTG ATCATGGTGG GTCAGCTGTA      540
CTGATTGTCA TCCTGACTTT GGCATTGGCA GCTCTTATAT TCCGACGAAT ATATCTGGCA      600
AACGAATACC TCGAG                                     615

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(2) INFORMATION FOR SEQ ID NO:1268:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 515 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

```

GAATTCGGCC AAAGAGGCCT ACAGAAGTTT TGTCAAATGG AGTGTATACC ACAGTCAGAA      60
TCTAGCCACC AAAATGGGAA GGGAGTGNAG CTGCCCTGTC CACAGGCTTC TCTATGGGAA      120
ANGCTGCTGT TCTGTAAAC ATGNTGGGGC NGGCTGTGGG GANGAAGGCA TTTTCTGGAC      180
CACATGNACG AATTGCAATT GGGGGACGGT CCTACCCAG TGAGGAAGCT GAAAGAAATG      240
GGCCTGATTT GGTGCAGGAC ANCCCCTGAA GACCGTGAGG CCCCTGGCCT CTGCCGCAGA      300

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TGGGAGCCTC	AGCAGCANGG	TTTAGGGCAG	CACCCAGGGC	ATCCTTGCCA	CGTGAGGCTG	360
CCGTTGGTGC	CTGGGCATCA	GTAGCTCAGG	CTGGAATAAT	TGGAAAGGAA	AAGGCAGGAG	420
GANCCCCCTGA	GGCCAGGCCA	TTGGGCTGGG	GAGCTGTAA	GCTGAGGTGG	CCCTAGGGCC	480
TGCCGGGGCT	GGGGGTGGCA	AGCCAAACTC	TCGAG			515

(2) INFORMATION FOR SEQ ID NO:1269:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC	AAAGAGGCCT	AGTGCAACTG	ATCTGTCCAG	TTGTGTATG	AAATGGATTT	60
GATAAAGTTT	TTGCTAGTTA	TTTACTACAT	TTGGGATTA	ATAAGTGATT	TATATGCATA	120
TTTTTCTGTA	AATCTACAGT	TTTTTGTACA	AGATATTCTA	CAAGTTATGA	AGCTAAGGGA	180
AGAAAATGCC	AAAGATACCT	CTAGTTATGT	TGAACACAGC	CAGCTCGAG		229

(2) INFORMATION FOR SEQ ID NO:1270:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 128 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

GAATTCGGCC	AAAGAGGCCT	AGTATGCCCT	TAAATCTGGT	TATTAGGTAA	TTCTTTTCCG	60
AGTAGGAGCC	CAGATCAACT	CACAGTGTTT	CTGAGTCTTG	GGAGATTGAA	TTCTAGACCC	120
GCCTCGAG						128

(2) INFORMATION FOR SEQ ID NO:1271:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

GAATTCGGCC	AAAGAGGCCT	ATTTAGCACA	AATTTCTTTT	TGCTTGCCTT	TTCAGATTTT	60
AAAACATTA	GAGAAAAACA	TACTTGATTG	CTAAAATTTG	TCAAACATAA	ATAGTAGACA	120
CAATTTAGTA	ATAATCATAT	TAATAATCAT	AATCATTAAT	ACTCATAATA	ATCANACAGA	180
GGACGCCCTA	AAATGTACAC	TGATTAAATT	TTATTTTTTT	CCCATGCATA	GCTAGCCTGT	240
TTGTACAACT	TTACTTTTGC	TGCTGCATGT	AACCAGATGA	TTTTTTAATC	AGATTACTGC	300
CTTTCTGATT	TATTTAGAAT	TTTTTTTCTT	TTTTTTTTTT	AAGAGACGGG	ATCTTATTCT	360
GTGCTCAGG	CTGGGGTGCA	GTGATGTGAT	CCTAGCTTAC	TGTATTCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```

GAATTCGGCC AAAGAGGCCT AGTTTTAAAG GACAGGTTTA AATAGGCTTA CTTTTTCTT      60
TTAAGTTCAG ATACCTAAGC CTTATGTCCC TAGCCGCAGT TTCAGATAT TTGCAGCTAA      120
TTAATTCTTA GGAAATCTAA TCTGAATTGA ATTAATTTTC CCTTTTAGGG CACACGAAGC      180
AACTTTTAGG TAAGAAAAAA AATGAAAACA GCTTTTGTTG CACATAATTC TTGCAACTAA      240
TGAAAAGTAA TATTGCTGTT CCCTTCAAAT AATGCAATAA CAAAACACCA AATGAGAGCA      300
TTGCATTGTA TTGTTATATT TGCTGTTTAA ATAATTTAGC TGCAAAAATC TGAGGGCTGC      360
TTTAGCTGTA ATTAATTATT CATTAAATGAC ATGCTAATTG CACAATACCT TTGAATATTT      420
AACAAAATGC AAAAACCAGG CTCTGAAGTT ATGTTTTTGTG TGCAAGGGGG ACACCTCGAG      480

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(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```

GAATTCGGCC AAAGAGGCCT AAGACCAGCC TGGGTGACAG AGCGAGACTC CGTCTCAAAA      60
AAAAAATTGA ATGAAGCAGA AATTTATTCT TTTAAGCCCA TTTAGCTGTT ACACACATAG      120
TTATAGCATA TTCTCTCTTG AGATAACTTG CTTTAAATTG GAAAACTAAT TCATTAAATA      180
TCCAACTCT ATATCATTTT TGGAAATAAGT GATTTTAGCA ATTTTGTATA CTATTCTAA      240
CATGATGCAT ATATTGAGTA TGTACTTTTC TTAAATGCA GGCAATACTC GAG          293

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(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```

GAATTCGGCC AAAGAGGCCT ACCGCTTTTT TTTTTTTTTT TGATAAAGAG AAGCCACCAC      60
CAGGAGGAGG CTTGAAAGCT TGAATTTAAT TACTCCTCCA TCTCCTCATT ATTCCACCCA      120
ACTCCCTACT TCCCCTCTC ATTTACAGC CTCCACCAGC TCTCCCCTCA GGCCTCCTAG      180
ACATCGCGCT CGAG          194

```

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC AAAGAGGCCT AAGAAGAAGA AAGAAAAATT GGAGAGAAAA AAGGAGTCTT	60
TAAAAGTTAA AAAGGGTAAA AATTCAATTG ATGCAAGTGA AGAGAAGCCA GTTATGAGGA	120
AAAAAAGAGG AAGAGAAGAT GAATCATACA ATATTTTCAGA GGTC	164

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 465 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC AAAGAGGCCT ATTTGGATGG CAACGAGCTC ACCCTGGCTG ACTGCAACCT	60
GTTGCCAAAG TTACACATAG TACAGGTGGT GTGTAAGAAG TACCGGGGAT TCACCATCCC	120
CGAGGCCTTC CGGGGAGTGC ATCGGTACTT GAGCAATGCC TACGCCCCGG AAGAATTCGC	180
TTCCACCTGT CCAGATGATG AGGAGATCGA GCTCGCCTAT GAGCAAGTGG CAAAGGCCCT	240
CAAATAAGCC CCTCCTGGGA CTCCCTCAAC CCCCTCCATT TTCTCCACAA AGGCCCTGGT	300
GGTTTCACA TTGCTACCCA ATGGACACAC TCCAAAATGG CCAGTGGGCA GGAATCCTG	360
GAGCACTTGT TCCGGGATGG TGTGGTGGAA GAGGGGATGA GGGAAAGAA TGGGGGGCCT	420
GGGTCAGATT TTTATTGTGG GGTGGGATGA GTAGGACAAC TCGAG	465

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 302 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC AAAGAGGCCT AACTGTGGTT CTTACATCCT AACAAAAGCT GCCCTCCCCG	60
CACATTCTTT TGTATGTTCC TTAAGCTTAA AGATGAATAG ATGCTTAAAG TATGCAACTA	120
TGGCATTGG AGTGCAAGAC AACTTGAAAA AGAGTGTGAA AACATTGTCA GATATAAAGT	180
TACTTCAATT CTTTGGAGTC TGTTTCCTGT CATGCTTAGA TGTTTGGAA CTTAAAGTTA	240
CAGAGGAACT GTTCTCTGGT AACAAAGACAT GTCTGAGTTT GTGGACTGCA CGCGATCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 401 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGGGT TAGCCTAAAG GAGAAAAAAG	60
CAAGGCTCAA GAGAAATTAG ACAGCAGCTT TCAAATATTT TTAGAGAACT AGGTTAATTA	120
TGGTAGTCAT TCAACAAGGT AGAAATCATA CCAAGCATGA AGTCACAGGA ATGTCCCAGG	180
AGTGTGCAAC CATTGGAAC GTCCATAGTA AAATGGGCCA GCTTGAGCAA TAAAAGTCTC	240
CTAGTACCAG GAAATGCTTA GAGGTTGGGG AAAGTGAAAA AAAGGGGGAA AGTTTGGTCA	300
GGTTGGGGAG CAGTCACACT TCTCCTGAG AGGTAGTAAA TACCAGGCTC TCCATCTGGA	360
GGAGGGGTCA GTAAATCACG TTGCAAAGG AATATCTCGA G	401

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCGGCC AAAGAGGCCT ACCCACCCCT ACTCCTCAAC ACTTCTGGTT TGCCCTGACT	60
TCTCTACGGC TCTGGCTTCT TCCCGAAGAG ATATAGGAGC CATGTAAGCA CGCAGTGGGT	120
GAACTGCTTA ATTTCACTAC ATGTTGATGT ACTTGCTCTC CGTCCTGTAG GTCTTTTCTA	180
TATACTTTA TGCCACCCCT AAATGAATCA TTGGGTATAC CTGTCATGTT GGATCCTGTA	240
ATCACAGTTT TCCCTGCTCA CCTTTTGTG TAAGATCTAT TGAGAAAGGG AAATATGGGA	300
AGGAGAACCA TTTGATCAGA ATACAACCAA TAGTCTTTAA GCATTGTTAA AGTATGAAAC	360
TGAAATACAT TCAAAACACT TTACACTCGA G	391

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCGGCC AAAGAGGCCT AGGACTCCAC ACTCCCCAGA TCCAGTATG ACTACATCTT	60
GCCTCAAGTT TCTTTCACCG CAGTGGGCTA CCATAAACAC ATCACCTTGA TTTTAATCC	120
CACGAGGAAG CTGCCTGAAC AGGACATCGC ACAAGGATCC TACATTGCCC TGCCATTGAC	180
GCTGCTGGTT CTGCTGGCCG GTTACAACCA TGACAAGCTC ATTCCTTTGC TGCTGCAGTT	240
GACAAGCCGG CTACAGGGAG TCCGCGCGCT CGGCCAGGCA GCCTCTGACA ATAGCGGCCC	300
AGAAGATGCA AAGAGACAAC CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

GAATTCGGCC	AAAGAGGCCT	ACAGATGCAG	ACACGGTGTC	CGACGAGTAT	TCTGACGAGG	60
AGGTGGTGGG	GGACGTGGAT	GATGCCGCCT	ACTCCATGGT	CAGTGCCTCC	CATGTGACCG	120
CCCCACCTG	GGCCGCTGTC	CGTCTAGCGC	TCTAACAGTC	TTACACCTTG	GCTTTCTCTG	180
TCCCTTGAAA	GAATTAATA	TATCTACTGT	GGACTGTTTC	ATAAAACCAA	CCTATGGTGT	240
TGCCGGGCAC	AGAACAAAGC	TGTGTTTCAC	TACTGAAGGG	ATGATTGGGT	TTCTATATCA	300
TAATTACTTT	TAGCTTCAGA	ACAGACCCTT	GTTCAAACAT	CTCATGATCT	TCGCTAACCA	360
TCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

GAATTCGGCC	AAAGAGGCCT	AAGAGAAGTG	TCAGCCTCAC	CTGATTTTTTA	TTAGTAATGA	60
GGACTTGCCT	CAACTCCCTC	TTTCTGGAGT	GAAGCATCCG	AAGGAATGCT	TGAAGTACCC	120
CTGGGCTTCT	CTTAACATTT	AAGCAAGCTG	TTTTTATAGC	AGCTCTTAAT	AATAAAGCCC	180
AAATCTCAAG	CGGTGCTTGA	AGGGGAGGGA	AAGGGGGAAA	GCGGGCAACC	ACTTTTCCCT	240
AGCTTTTCCA	GAAGCCTGTT	AAAAGCAAGG	TCTCCCCACA	AGCAACTTCT	CTGCCACATC	300
GCCACCCCGT	GCCTTTTGAT	CTAGCACAGA	CCCTTCACCC	CTCACCTCGA	TGCAGCCAGT	360
AGCTTGGATC	CTTGTGGGCA	TGATCCATAA	TCGGTTTCAA	GGTAACGATG	TGTGCGAGGT	420
CTTTGGTGGG	TTGAACTATG	TTAGAAAAGG	CCATTAATTT	GCCTGCAAAT	TGTTAACAGA	480
AGGGTATTAA	AACCACAGCT	AAGTAGCTCT	ATTATAATAC	TTATCCAGTG	ACTAAAACCA	540
ACTTAAACCA	GTAACGAG					560

(2) INFORMATION FOR SEQ ID NO:1283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

GAATTCGGCC	AAAGAGGCCT	ATTTTCATCA	ATAGTAAGTT	TTTATTGTCT	GCTAATTTGG	60
TAGATAAGTT	GAGACATCTC	ATTGTTACTT	TAATTTGCAT	TTTCTCCACA	TTAGAAAATA	120
TTTTCATTTG	TTTATTGACC	ATTGCAATT	CTCTTCTATA	AATTGACTTT	TTATATTTAT	180
TTGTCTCTAT	TTCTGTATTC	TGTTGATAGT	CAATTTATAG	GAACCTTCTG	ACAGATATGC	240
ATATTCATTT	TATGTGTGAG	TTATTTTGT	GGCACTCACT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:1284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

GAATTCGGCC	AAAGAGGCCT	ACTTCGGTTG	CGGGATTCCCT	CCTCTGCCTG	GGTCATTCTT	60
TCTCGTGTCA	TCTGATACGA	GTCGTTTGTT	GCACACACTG	TAATTTTATC	TTGTATAAAT	120
CCCAGGCAAT	TGAGCTGGGA	GGCTCCAGAG	CTGGAGAATG	TTTGCTGGAT	GCAGTCAAAG	180
CTGCCCTGAG	GTTTGTCTTT	GCCCACATTT	GACAAATAAA	AGTTAAAGTT	ATGAACTTCA	240
TTGAGGGGAT	CATTTTGGG	AATTTTGACA	AGCCCGTGGA	GTCCCTGGAA	CTGGATTGAA	300
GGTCGAAAAG	GAATTAAATT	CTTGTGGCTC	TGGTAAGTCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

GAATTCGGCC	AAAGAGGCCT	AGGGAATTTG	TTTTTGCATA	GGGGAATAGG	TAAACCAAAA	60
GTGGTATTAA	AAGCAGTGCT	ATAGTAAAAG	GAGATTTTTT	TTAACTCCAC	AATAAAAAGT	120
TTAGGCCCAA	TTTCATAGTA	AAACTATTCT	AATTAAGGAT	TGAACATATT	ATCACTTGCC	180
TTGATTTTGA	CCAGTGACAT	TTTTTGGCTT	CTTCATTTCA	CCTGTGACCA	TCTGAATGCT	240
TTCTATTTGG	CTCTTTAATG	CCCAGATTTT	ATTGACATTG	GTGGCGAATC	CCTATTCATA	300
CACAGACAAA	GCATCTGACT	TTGTCCAAGA	AGCAAGCATG	CTGCAGGCCA	CTATGACGAA	360
GCAAGAAGCC	GATGACATGA	GCATTCCCAT	CTCCACATT	GACGATGTTT	TCGACATGGT	420
GGATGTCTCT	GTGGAGGGCA	GTGAAGGCTT	GGATGAGGAA	ATAGGGTTCA	CGTTGAGTGA	480
AGACATGATC	CTGCTCACGT	TCCCATTGAG	TGCGGTAGTC	CCTGCGGCCC	TGGAAGCCAG	540
GAATAAGTTG	CTCCTTGGGA	CAGGCAATGA	AGCAGATACC	CTCGAG		586

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

GAATTCGGCC	AAAGAGGCCT	AGTTGAACAT	AACTTGTAAGT	GTGAATATGG	TTAAAACAAA	60
GGACACCTGA	TGTCTGTGAA	GTCTGCTAAG	GACAGGTACA	AAATTATGTC	ATTGCTTTTT	120
AAAAAGTTTA	AAATGAGGAA	TGCTTTTGAT	AATCAGAAAG	ACTAATGTAA	AGTGCTGACT	180
GATGTCCTGT	CTGCAGTTAA	GGAAGACACC	CAACTCTCTT	CTTCCTCATC	ATGGTATTCT	240
CTATGTATAG	ATCTCTAAAA	ATGCAAAACCT	CCTATGGACA	AGACAAATATG	ATTTGCTATA	300
ATATGAATTA	AGATATGGTA	ATATCTAATA	GTCTCCACTG	CTAGGATTCT	GAGTAACACA	360
AAAAATAGGT	TTTATAAAAA	GCCCATGCAC	TTCAATTGGT	GGGGGAAAAG	AATAAAGTCA	420
TTTTCAGTCG	ACTGACTCTG	TAAAACAGAT	TACCAATATA	ACAAGCTATG	TTATCTAAAT	480
TGCCCTGGCT	ACTCGAG					497

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

GAATTCGGCC AAAGAGGCCT ACAGGAGTTC ATTTTCATCC AAAACAAACA CTGGACTTCC	60
TGCGGAGTGA CATGGCTAAT TCCAAAATCA CAGAAGAGGT GAAAAGGAGT ATAGTAAAAC	120
AGTATCTAGA TTTCAAACCT CTCATGGAAC ATCTGGACCC TGATGAAGAA GAAGAAGAAG	180
GGGAGGTTTC AGCTAGCACA AATGCTCGGA ACAAAGCAAT TACCTCACTG CTTGGAGGAG	240
GCAGCCCTAA AAATAATACA GCAGCAGAGA CAGAAGATGA TGAAAGTGAT GGGGAGGATA	300
GAGGAGGAGG CACTCCCGGG GAACTCGAG	329

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 459 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCGGCC AAAGAGGCCT ATGCATCGCG GGAGGCGCAT GGCGGGGATG GCGCTGGCGC	60
GGGCCTGGAA GCAGATGTCC TGGTTCTACT ACCAGTACCT GCTGGTCACG GCGCTCTACA	120
TGCTGGAGCC CTGGGAGCGG ACGGTGTTCA ATTCCATCCT GGTTCCTATT GTGGGGATGG	180
CACTATACAC AGGATACGTC TTCATGCCCC AGCACATCAT GGCGATATTG CACTACTTTG	240
AAATCGTACA ATGACCAAGA TGCGACCAGG ATCAGAGGTT CCTTGGGGAA GACCCACCCT	300
ACGAAGTTGG AATGAGACCA TCAGATGTGA TAAGAACTC TTCTAGATGT CAACATAACC	360
AACCTTATAA AGACTAAAAT TCATGAGTAG AACAGGAAAA TCATCCTGAC TCATGTGTTG	420
TGTTCTTTAT TTTTAATTTT CAAAGAGGCT CAGCTCGAG	459

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

GAATTCGGCC AAAGAGGCCT ACTACCTGCC TGAAATTCAA TGCCGTGTTT CTTCTGGACC	60
AGTTTTAAGC CATCTCTTCT GTTGTTCCTT TCCTCCCAA GATGTAGACT TTTCCACTTA	120
AAAGCATTTC CAAGATTCTA TTTTTCATC CTTTTTCTG TCCCTATTCT CTTTCACTCC	180
CCACACTTGT TCCTAGCCTG TCTCTGTTGC TCTGATGTCC ATGTTGATGG TGGCGGTCTT	240
CAACCATGCC ATCCGTGTGC CAACCCAGCA CTTTCCTGCC ATCCCTGTAG CCCTTGCCCC	300
AACATCTGTG CATTTGACTC CCCACCACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:1290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

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GAATTCGGCC AAAGAGGCCT ATCCACCCGC CTCAGCCTCC CAAAGTGTTG GGATTGCAGG      60
TGTGAGCCAC TCGCCTGGC CTAAACAAAC TTTTGAAAA GCTGTTTCTA AAAGATTCTT      120
TAAATTCAGA TATGACAGCT AATTACCTCA TCATAAATTA CTTTATACT AATGTTTCC      180
AGGGTTTTAG AGTAGTTGAA TGTTTATTTC ACAAGGCACC CTAAATTCTA TAGAAATAAA      240
ACCTCAGATG AGTCTCCTTC TTAGAGTGTT ACAATGAATG GGAGTTTACA ACTTTTATGT      300
GTCATGTTTC CAACAGCTAT CTCGAG                                     326

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(2) INFORMATION FOR SEQ ID NO:1291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

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GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCTG CTCGTGCTC GTCCAGTACA      60
TTGGCTTTGA AATATACTTG AATTGTGGA GGCAGGGTGT AGAATGACAA AAACAAACAA      120
AAACCCACCA ATACAGACCA AATTGGGGTA CACACGGACA GATTGGTTTT AATTTTATTT      180
TAATTTTGA GTTTCTATGA GAAGAAGAAT GAGGAGAGAC AAAAAAGGGG AAGAGTGAGA      240
GATAGTATAT TTAGGGTATG ACAAATCAGG GATGGCTCGA G                                     281

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(2) INFORMATION FOR SEQ ID NO:1292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

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GAATTCGGCC AAAGAGGCCT AATTAACTA AATCTTAGGG ACTTAGGGAT TTAACTAAA      60
TCCCCACCAC ATCTGATTTC CCCTCCTCG AAATACCAAT AGTACGTGCA ACACAGACTT      120
GTAGCTCAGA GGTGCGATGC TGTTTCAAAT TCTTGGGATA TGCATGTTAC TTTTTTTTAA      180
AGAAGTGGTA TATCAGACAC CTGAAGGTCA AGTCTCTCTG TGCCACCAAC AAACCTCTCGT      240
GACCTTGAGC CCCTCCTCTC AATTCCTCTT CGGTAAAAGA AATACCTCAC AGTGGCTGTG      300
CAATCACCAA ATAGGAACTA CAGGTGGCAT TATTATCTT TTGCCCTTGT GTAAGAAAAG      360
ACTCGAG                                     367

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(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC AAAGAGGCCT AGGATATTTT AAATTTTGTT AATTTTGTTT CGTGGTCTCT	60
GCCTGAATAG ACAGGCACTT GCCTGGAACG TAATACTGTT TCACTGCCTC GTTTTTACCT	120
GTTTAATCTA GAACCAAATT GTGTCAATGT GTCAGCCCGT TTGTGCTTTT ATAACAAAT	180
ACTACAGACA GTAATTTATA AGAATAGAT ATTTATTTCT TCACAGTTCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 562 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC AAAGAGGCCT ATACTGATCC TCTCCCCTTG TGCATCACTT TTTCAGTGCA	60
GATATCTTGT AGCTCCGTGT CTAGAGGTAG CCAAGGTATC CTCCTAGCTT GCCTTCTTGG	120
TTTTATACAT GCTTCAGTAT GTAAGACAGC TTGTAGTCCA AACTCATGAG ATGACTATTC	180
TGCCTGCCCC ATCTTACCTC AACAAGTGAG CCTGCATGCA TGTGCTCCTC AGTCTAGTCC	240
CAGGATAGGA GGTAGGGGTC TCACATCGAC CTCAAGTTCA TATGACTTTT TCTAACTCAC	300
CTTTACCACA CAGCCCTTAC TGTGGGGCTT ATAAAGTGTC ATGGAGATTG GTGAAGTCAA	360
TGTTTCCTTT CCTTGTTTAT GTGCTTTATA AATTAGGTCC CTCTCCAAAA CTTTTGCATC	420
ATCCTAAACT GAAACACTAT GCCCATGAAG AAGTCATTAA ATAAAAGACT GATAAATTTG	480
ACTCCATAAA AATTAAAATT TTCTATATAG GAAAAATGC CTCAAAGTCA AAAGTCAATC	540
ACCAAAGTGG GAGTTACTCG AG	562

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 322 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

GAATTCGGCC AAAGAGGCCT AGACACCCGT CATTGCAATT TATATTTTAA CAAAGGCTTC	60
TGATCCTAAT TTCAGGAAAT AGCCTCTAAA CTCATCTATT AGTCCCAAAT TCTTTACCCA	120
TTAAATCTGC TATTTTATGC CTCCTATATT CTTACCTTCA GATGTTGAGA GGTGGGGCA	180
TAAACTTTG CAGCACGTCT GCAGTCTTCC CTCTAGAGTG AACTTGATCC TGCTGTTGT	240
TCTTTTATT CTCTTCAAAG TTAAATCATA TTCCAGCATT CATGGTATTT CTCCAGCTTG	300
TCCTCCACAC TCACCCCTCG AG	322

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 313 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

GAATTCGGCC AAAGAGGCCT AAGCTGTTTCG GGTACTTGTC AAAAATGGCT TCCAAATATA	60
TTCCTTTTAA TACAGGATGT GAAAACACTT CCTAATAAAT TCCTGCAAAA TTAGATGATA	120
CTGTATGTAC TTCTGAAGGA CAGACAAGAA AGTAACCTAA GACCAAAACA ATAGAGGTCT	180
CCTACTACTG GGGAGAAGGA GGATTATCAA GAATAGAGGA AAACAGAGCC TGCCTAAGAC	240
TAATACTGGT CTAGAACAAA AGAGAAAGCT CAATTCCTAC CACCACAAAG CTAAACAGCA	300
TCCAAGGCCT CGG	313

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 340 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

GAATTCGGCC AAAGAGGCCT AGATTTTGT CTTTAATTCT CTGTGTTTTT AGNACCTTGC	60
GATTTTAA GATATTAAC CTTTTCTCCT AGATGTTTAC CTTTGAAATA CCTCTCTCTC	120
CTAATGATTT AGACCTATGT GTCCAACCTAC TTTTCGGACA TGTTTCCCTA GATGTCTCAT	180
GGTAACTCC AATTTAACAT TTCAAAGTT AAATTTATTT TATTTTACCA GACTTGGGTT	240
TTTTGTTTTT TTTGTTTTTG CTTTTTCCCT TTTTAAGATA TCCTGGAGTC ACCAGAATCC	300
TATCTAGATA CCCTTGGTTA GAGTTGCTCA TGATCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

GAATTCGGCC AAAGAGGCCT AGCTTCTTCT GAGAGAGTCT CTAGAAGACA TGATGCTACA	60
CTCAGCTTTG GGTCTCTGCC TCTTACTCGT CACAGTTTCT TCCAACCTTG CCATTGCAAT	120
AAAAAAGGAA AAGAGGCCTC CTCAGACACT CTCAAGAGGA TGGGGAGATG ACATCACTTG	180
GGTACAACT TATGAAGAAG GTCTCTTTTA TGCTCAAAAA AGTAAGAAGC CATTAAATGGT	240
TATTCATCAC CTGGAGGATT GTCAATACTC TCAAGCACTA AAGAAAGTAT TTGCCCAAAA	300
TGAAGAAATA CAAGAAATGG CTCAGAATAA GTTCATCATG CTAAACCTTA TGCATGAAAC	360
CACGCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 342 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC AAAGAGGCCT AGTTGGAGTT TGCTGATAGA AGGACTAGCT AAAGGCGTCA	60
CTGCAGGAAT TACAAACTGA AGAGGACTCT GTTGGACTGT TTTTNTTTTC TTTTNTTTTC	120
TTTAAAGAAA AACCCATTTT TTTCTTAAG GACTTACTAG CCAAATTTTC TTAAACTTCG	180
AGGACTCTAC TAGCCATGGC CGAGCCATTC TTGTCAGAAT ATCAACACCA GCCTCAAAC	240
AGCAACTGTA CAGGTGCTGC TGCTGTCCAG GAAGAGCTGA ACCCTGAGCG CCCCCAGGC	300
GCGGAGGAGC GGGTGCCCGA GGAGGACAGT AGGCATCTCG AG	342

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 217 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC AAAGAGGCCT ATCTAGACCT GCCTCGAGTT GGTCTATCCT ATGCTTTATA	60
CGCTAAGAGA GACCACATT TATTGCTGT GTCCAACACA GGAATTTAAT AAATGTTGAT	120
TTTAGGAATG CTTTCAAGTT CCTCTTTATC TTTATATCTC TTTCTACTTT GGCTTCTCCT	180
CTCTAGAGAA GTTCTAGATC TTTCCCCAAC TCTCGAG	217

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 237 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

CCTTCGGAGA GAGGCACGCC CGGCCCGGAC AGTTCAGGCT CTCTCGGCTC CGGGGAGTTT	60
ACTGGCGTGA AGGAGCTTGA TGACATCAGT CAAGAGATTG CCCAGTTACA AAGAGAGAAA	120
TATTCAGTGG AACAAAGACAT TCGAGAAAAG GAAGAGGCAA TCAGACAGAA AACCANCGAG	180
GTGCAGGAAT TACAAAATGA CCTAGACCGG GAAACAAGCA GTTTCAGGA GCTCGAG	237

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 379 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCGGCC	AAAGAGGCCT	ACAAAGGAGA	CCCTTCATAT	CAAAATACAG	TTATCAAAAT	60
ATTTTAAAGT	TATATATAAT	TATGTGCTTC	TNCTACTAATG	TCTTAAATAA	TGAGATCAAA	120
CAGCAGATCT	TAAAAACTGT	CATAATATTT	GGAGTAGTGA	TGGGCATAAA	AGTTATTCTG	180
AGATCTCCGC	AGGAACTGTA	ATGTGATATG	AAAAAGTCTG	TGACTCCTGT	TACCAACAAA	240
GTCTCAAGTC	TCAAGTCTAC	TACTAGGGTA	TGTTACCTAC	ATTCCCTAAG	TGAGGGAAAT	300
GTTATGTTTC	AGTTGAGGGC	AAATGATGGC	AATGATGTAA	TTTTTTTCTC	TTTCAAGTTC	360
ACAGCCCCCC	CCGCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:1303:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCGGCC	AAAGAGGCCT	ATTTTGCTGA	TTTCTTCTTA	CATATGAATT	ATGTGGGTAT	60
GTTTAAATTT	AAGTTAGGAT	AAACAGGCCT	TAAGTAAGGG	TTAGTGTAGA	ATTTAAGCAT	120
GTCATTTTGT	TAATCTCATC	GGGCCTTGAT	TTCATTAGTT	TAGGCCCTCC	ATTTTATAGA	180
TAGTGGTTCC	CAGACTTCCC	GGCTGCCTCA	ATCTCCTGGG	TCTTTGTAA	ATAACCTTAA	240
GCAAGCTCAT	TTCCCCCAGT	GTGTTCAAGT	CACAGAAAGC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1304:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 356 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GAATTCGGCC	AAAGAGGCCT	AGTTGGTATC	TGCCCAGGGA	TAATTGCTCT	TAGGGTAAGA	60
CTTTTAAACAT	GTAAGCCAGC	CTGTCAAAAG	TGCACCTAAA	AGTTCTCTTT	CAGTCATTTT	120
CTGAGTTACT	GATAGGAACA	TAGGTACTGT	GTGAATCAGA	TCTGAGAGGA	TTATGAATGT	180
TATAGAATGC	CTTTTGTTAG	GGAATTTAAG	CCCAGAAGAA	GTTGGGAAAG	TGACAGATTT	240
ATATAAATGC	GAGTGACAAA	ACCAGTTAAA	ATGTTCTGAC	TCAACCTGAA	ATATGTTGGA	300
CTATATAATA	AATATAATAT	TGTGAGATAT	TCTGAACTAG	ACTCAACTCG	CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:1305:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 489 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

CTCGAGTACG	TAGCGTAGAA	ATAGAGAATA	GGTCATCAGG	TTGGAGGTGG	AGTGTTTAAG	60
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GACAAAGTTA	TAAAGAAGTT	TTTGGTTTG	AAAAATTAGA	GGATAGGTTT	GTACCATAGA	120
CAATGGATA	AGTTCGAAA	AAATCTTTT	TTTTTTTTT	TTTTTTTAA	AAAAAAGCC	180
ACGGTCTCAC	TATGTTGACC	AGGCTACCAG	GCTCGTCTCA	AACTGCTGGC	CTCAAGCAAT	240
CCTCCACCT	AGGTCTCCCA	AACTGCTGGG	ACTACAGGCA	TGAGGCAGAA	TCGCCCAGAC	300
CCAGGAGGCA	GAGGCTGCAG	CGAGCCAAGA	TCACGCCACT	GCACTCCAGC	CTGGGTGACA	360
GAGCAAGAAT	CCGTCTCCA	AAAAAAAAGA	AATAAATAAA	ATAAAAAGG	GTGTTCCATA	420
GGGTGATGG	GGAGGATGAA	ACGTCATCAA	ACAAGTTTAA	GAAACATCTA	GGCCTCTTG	480
GCCGAATTC						489

(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCGGCC	AAAGAGGCCT	AACTCAAAT	AAAGAAGAAA	TACAGGAAAA	GGAGACAATC	60
ATTGAAGAAT	TAAACACAAA	AATAATAGAA	GAAGAAAAGA	AACTCTTGA	GCTAAAGGAT	120
AAATTAACAA	CTGCTGATAA	ATTACTAGGA	GAATTACAAG	AACAGATTGT	GCNAAAGAAC	180
CAAGAAATAA	AAAACATGAA	ATTAGAGCTG	ACTAATTCTA	AGCAAAAAGA	AAGACAGTCT	240
TCTGAAGAAA	TAAAACAGTT	AATGGGGACA	GTCAAGAAG	TTCAGAAGAG	AAATCATATA	300
GACAGCCAAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCTAGA	CCTGCCTCGA	GTAAAGCCTG	TAGGTAAAT	GGAGACAGAT	TTGAAAGAAA	60
TTAGAGAAGA	AATTTCCCAA	AGGGAAAAGG	TGCTAGCAGA	GATCAGTGCT	ATAAGGGAAA	120
AGGAGATTGA	TTTGAAAGAA	ACTGGAAAAA	GAGACATTCC	CATGATGGAG	AAAGTATCAG	180
GAAAGATGGC	TGTTGTTGAA	GGACATCTCG	AG			212

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GAATTCGGCC	AAAGAGGCCT	AGAAATATTA	ATGAAATCGC	TGAAAAGCTT	TGCCTTCGAG	60
AGGCCAGAAG	CCTCGCGGAA	TGTCTGCAAG	TCCAAGACG	CGTGTGGGTT	GTGCCCTGAA	120

GTGCCGTCCA GCAGGCGCGT GCGGCCGGGC CGGCCTGTGC GTGTGGCCTT TGCCTTCTTC	180
CCTTTCTTCC TGTTTTCTGT TTTTAAATT TGGGGACTGG TGAGGGCTCG TCCATGTCCT	240
TTGTCAGGTC TTCTGCTCC TCCCCTCGAG	270

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC AAAGAGGCCT AGTCTTATAC CTGGGATGTA GCTGACAAAT TATTGCATTG	60
TAAATGAGT CACGTGAATC ACGGAAGCTT TAACTTTT CTTTTTATAG CCCTACCTGA	120
ACCCATCCTT CCATCCCTCC AAAAAATTTA CCCAGTAAGT GTTCTTATA AATTATTATA	180
ATACATTTTA TGCAAGTGT ATGTAGAAT ATTATAAGTA GTATTAATGT GATTATAAAA	240
GTAAGAGGC TAAGTACATG ATAACATTTT CTATATATAC CAAGAGAACA TTTAAAATGT	300
TTCATATACT GTTCAGAAA ACTCTCTTAC TTGTTATTTT GTTATTGGCA GACAGTCTGG	360
TCAGTTGTGT TAATGGTGGA CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

GAATTCGGCC AAAGAGGCCT ACCATTTTAG CCTGCAGGCT TCCTTGGGCT TTCTCTGTGT	60
GTGTAGTTTT GTAAACACTA TAGCATCTGT TAAGATCCAG TGTCCATGGA AACATTCCCA	120
CATGCCGTGA CTCTGGACTA TATCAGTTTT TGGAAAGCAG GGTTCCTCTG CCTGCTAACA	180
AGCCACGTC GACCACTCTG AATGTCTTTC CTTTACACCT ATGTTTTTAA GTAGTCAAAC	240
TTCAAGAAAC AATCTAAACA AGTTTCTGTT GCATATGTGT TTGTGAACTT GTATTGTAT	300
TTAGTAGGCT TCTATATTGC ATTTAACTTG TTTTGTAAAC TCCTGATTCT TCCTTTTCGG	360
ATACTATCTC GAG	373

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTCGGCC AAAGGAGGCC TAAACAGATA TTTACTGAGC ATTTACCATG TTCAGTAACC	60
AGGGCCCTGG GAATATAATA GGAGAAGGCA GATGAGATCC TTGCCTTCAC CAAGCTTATG	120
TTTTTCTATT TTAAGTAAAA TTTGCCATGA CAAATTTCT ATCAGCGGAA GAGCCAGTAA	180

CTCTTATTGT AATAGGTTTT ACCCAGTTTT AGAAAAGGAA AGTAGCTAAA CTCTTGTTTC	240
CTTGGTGTGT GTTTTGTITT GTTCATTTCT AGTACTTGTC TATGTCTTTG GGGTAATTTT	300
TGATTTAGAA TTTTGTAGAA ATTACTCGGC ACAGTGTAGT TGAGGTGAAT ATAGGCAAGA	360
AGGCTTAGGA AGCCTACAAC AAAGGAATCT GACACACTCG AG	402

(2) INFORMATION FOR SEQ ID NO:1312:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 519 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC AAAGACGCCT AATTGAATTC TAGACCTGCC TCGAGTTGGA CCCTGAGTGT	60
ATCACTCCCA AGTGTGTACT ATTTATACAC AGCAGTTTCC AATGTACTCA AATCAACCTC	120
ATGTTCTTTG CTGTAGTAAG CTGAATGAAC ATGACTCTTG AATCACCTTA AATATGCTTG	180
ATAACATGTC AGGATTGAGA ACAGCAAAAA AGAAAGCTTT AAAGGGAGAT ATGCTGGGCT	240
CATTCACATC AACTGTCAGG GGAAACCTGG TTTATGTCCC ATAGCTACTA GAATTCCTAC	300
ACTTGCCAG CTTATTTTAA TAGACCATT CTCAACTACT CTAGCTGTTT TGTCTAGTTC	360
TAAATAAAAA GCTAGGTAGT TGGGTACTAA AAGGCAAATA TGAATATATC AGTGGCTCTG	420
TATCATCTGC AGCAGTGGTT CTCAGTGTGA TTCCTGGACA GGCAGCACAA GCATCATCAG	480
GGAACCAGTC GGTAAATGCAA ACTCTGGGGC GCACTCGAG	519

(2) INFORMATION FOR SEQ ID NO:1313:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 157 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT ACGAGGACGT GAGCAGATAT ACCAGCCCAG TGAACCCAGC	60
TGTCTTCCCC CATCTGACCG TGGTGCTTTT GGCCATTGGC ATGTTCTTCA CCGCCTGGTT	120
CTTCGTTTAC GAGGTCACCT CTACCAAGAC ACTCGAG	157

(2) INFORMATION FOR SEQ ID NO:1314:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 449 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

CTCGAGTTCA CTACCATGAC AATCATTAAT TAATTTGGTT TCTCTAGTGA GGTTAGTTGC	60
TTTCTTCCCT TCCTCCAGCA TCTGACCAAG GTCTGATTCT ACAGCTATTT GGGAAACAGT	120
AGTTTCTGGT GACATAGCTG AAGACCCTGA TGCTGTCATA GTCTGAATTC CAGAATCTTT	180
AGAATCTTGA GTTTCAGTAT CAGTTTGCTT TTCAGTAACA GGTTTTCCTT CTTGAAATAT	240

TAATTTGTCA TCATTACCAA ACATGTCCAG TTTTTCACCG GCTTCAGATG CAGCTGGAGA	300
CAAACCTGTTA TCTTGGAGCT CTGTGGGTAG ATTAGCTTCC TCAGTAGGAC TGCCTTCTAC	360
TTTCAGTTCC ACATAATCAT CATCTTCCTC TTCCTCTACT ATAGATTTAT CCAAGAATTC	420
TGGCATCTCT GAGGCAGGTC TAGAAATTC	449

(2) INFORMATION FOR SEQ ID NO:1315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

GAATTCGGCC TTCATGGCCT AGTGAATAC TAGGATATTT GTTTGGCAGC AATAGAGCGG	60
CAACACCCTT CTCAGACTCG TGGTACTACC CGTCCTATCC TCCCTCCTAC CCTGGCACGT	120
GGAATAGGGC TTAATCACCC CTTCATGGAG GCTCGGGCAG CTATTCGGTA TGTTCAAACT	180
CAGACACGAA AACCAGAACT GCATCAGGAT ATGGTGGTAC CAGGAGACGA TAAAGTAGAA	240
AGTTGGAGTC AAACACTGGA TGCAGAAATT TTGGATTTT CATCACTTTC TCTTTAGAAA	300
AAAAGTACTA CCTGGTTAAC AATTGGGAAA AGGGGATATT CAAAAGTTCT GTGGTGTTAT	360
GTCCAGTGTA GCTTTTGTGA TTCTATTATT TGAGGCTAAA AGTTGATGTG T	411

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

GAATTCGGCC AAAGAGGCCT ACATCCAACA AGAAGCCATA ACTTTATTTA TGATAGAAAC	60
AGTACAAATT TCAAACCAAG CTGCAGTTAC TCCTTTGAGA CACCAAAAAA AGTTGCCTCC	120
ATATGGTTAC ATTGTTAATT CCATAATCGC ATTTACAATA TCATTACTGT TGTCTTCAG	180
GGCTCGGACT GCCTTTGCTC TCGACACATT TGCTTGTGAC ATGACCAATT CTATGTCCTT	240
AACTTCTACA CCTGTTTCAC TTCCTCTTCT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC AAAGAGGCCT AGGCGGAGGT GCAGGTCCTG GTGCTTGATG GTCGAGGCCA	60
TCTCCTGGGC CGCCTGGCGG CCATCGTGGC TAAACAGGTA CTGCTGGGCC GGAAGGTGGT	120
GGTCGTACGC TGTGAAGGCA TCAACATTTT TGGCAATTTT TACAGAAACA AGTTGAAGTA	180
CCTGGCTTTC CTCCGCAAGC GGATGAACAC CAACCCCTTC CGAGGCCCTT ACCACTTCCG	240

GGCCCCCAGC CGCATCTTCT GCGCGACCGT GCGAGGTATG CTGCCCCACA AAACCAAGCG 300
AGGCCAGCC GCTCCTCGAG 320

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC AAAGAGGCCT ATAATTTTTC CCATCATTTA CCCTGATAAT CTGCCTCTTC 60
TCCATTTCTC CTTCCCTTAC TACCTTTCTT TGAATTACTG TAACTGATTG GTCCCACCAA 120
AATTTTAAAG TACATGAAGT ATCTTCATTG GTTCATCCTC TTGCCCCCTC CAGATGTCAA 180
AAAACTTTAT CCTGCCCCCT TGCTCCACC CGATGGCCCA CTCGAG 226

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

GAATTCGGCC AAAGAGGCCT ATGAAGCTTC TGAGTTCTGC GGCCTCACNT CTGAGAAAAC 60
CTCTTTGCCA CCAATACCAT GAANCTCTGC GTGACTGTCC TGTCTCTCCT CGTGCTAGTA 120
GCTGCCTTCT GCTCTCCAGC GCTCTCAGCA CCAATGGGCT CAGACCCTCC CCCCCTGGC 180
AAATCTCTCG AG 192

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

GAATTCGGCC AAAGAGGCCT ATTTATTACA ACAGATCTTT TAATGACTAT TTTAACATA 60
AAGATTGTTG TTTTGGGAAA CATCTATTCT CTTTGAACAT TTCATAAAT TTCAATGTA 120
TTAAATAACT GACAGAAATA AGTTCTGTGT TCTGTACAAA TTAAAGGTCC CATGAATACA 180
TAACCCCCAC CCCCCCCCG TCACTCGAG 210

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TGATCTATGA ATGATTTATT AGATAAATTC	60
TATACATACA AAGTACAGAT TCTTCATTGA GCATTGATTT ACTTCTTAGT TTTCATCTTT	120
CTGACTATCC AAACCGCTGA CTCGAGGCAG GTCGAG	156

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 199 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

GAATTCGGCC AAAGAGGCCT ATTTTGTCTA CACTATGTGA CAGAACAGCT TATAAACTA	60
GGTATGAACA TTAAGTGTGA GTGTAAACAG TAGGACTACC ACTTGTCAAA AGTTTTAAAC	120
ACTTGAAGTG GAAGTGGTAC TGGTTATTCA TCATTTTCAT TGTTTTCTAT TTCATCCCCC	180
CCACACCCCT CTGCTCGAG	199

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 209 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

GAATTCGGCC AAAGAGGCCT ACACGGTACC AAACACAACCT CAAGCATCGA CTCCTCCGCA	60
GACCCAGACC CTCAGCCGA ATCCTCCTCC TGTGCAGGCC AGGCCTCACC CCTTCCCTGC	120
CGTCACCCCG GACCTCATCG TCCAGACCCC TGTCATGACA GTGGTGCCTC CCCAGCCACT	180
GCAGACGCCC CGCCTCAG CGCCTCGAG	209

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 229 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

GAATTCGGCC AAAGAGGCCT AATCACTACT CACAGTAACC TCAACTCCTG CCACAATGTA	60
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```

CAGGATGCAA CTCCTGTCTT GCATTGCACT AAGTCTTGCA CTTGTCACAA ACAGTGCACC      120
TACTTCAAGT TCTACAAAGA AAACACAGCT ACAACTGGAG CATTACTTC TGGATTTACA      180
GATGATTTTG AATGGAATTA ATAATTACAA GGCTCCAAAC TCACTCGAG                229

```

(2) INFORMATION FOR SEQ ID NO:1325:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```

GAATTCGGCC TTCATGGCCT AGCTTTCCCA ATCTCTCGGA GCATGCACAT CAGGGCCACG      60
TTGGTCTTCC CAGCACCAGT AGGAGCACAC AGCAGCAGAT TCTCATCCGT CTCAAGGGCA      120
GCACGGTAGA GCTTACTCTG GATCCGATTC AGTGTTTTGA AGCCCTCAA CCCAGCCTGG      180
ATTGAATTCT AGACCTGCCT CGAG                204

```

(2) INFORMATION FOR SEQ ID NO:1326:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

```

GAATTCGGCC AAAGAGGCCT AGCCGATCTC CAGCCCAAGA TGATTCCAGC AGTGGTCTTG      60
CTCTTACTCC TTTTGGTTGA ACAAGCAGCG GCCCTGGGAG AGCCTCAGCT CTGCTATATC      120
CTGGATGCCA TCCTGTTTCT GTATGGAATT GTCATTCCCC CAGAGCGTCT CGAGGCAGGT      180
CTAGAATTCT AG                192

```

(2) INFORMATION FOR SEQ ID NO:1327:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 222 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

```

GAATTCTAGA CCTGCCTCGA GAATAGGATA GCATTTAGTA ATTCACTTAA CAATTTTAT      60
TGAATATCTA TTGTTTTATT GAATATGCTT GTCTCACCT TAGCACATTT GCCCTTGTC      120
TCCCTGGGAT ACTATTCCCC TAGATCTGAT TTTGGTTTTT TGTGTTGTT TGTTTTAATT      180
CTCTGCCATC TTTCTCCAGT CAAATGTCAC CACTCTCTG AG                222

```

(2) INFORMATION FOR SEQ ID NO:1328:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```
GAATTCGGCC TTCATGGCCT AAGAAATGTT CACTTTTCCA ACTTAAAAGG ATTTTAAAAA    60
ATACAAACAT AATTGACCTA CCTGGTTCAA AGAACAGAAG TGAGGAGAAC TTGCTTAAAG    120
GTATTGATGT TATATTTTCT CTGACTGAG TGCTTGAAA AAAATTTTAT TGAACATATG    180
TTCTCCTTCC GTGGCTTTT TGTCTTTGCT TTTTGTGTT GTTTGTGTT TTTTCTTT    240
GAGATGGAGT CTCACTCTCT GCTCGAG                                     267
```

(2) INFORMATION FOR SEQ ID NO:1329:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```
GAATTCGGCC TATGGCCTAA AAAAAAAAAG AAAGAAATAG GATTGATACA GGTATAGATA    60
CATAGATACA TGAGAAGGGA TTTATTATGG GAATGGGCTC ATATGATTAC AATGATTACA    120
GAGGCTGAAA ATTCCCACAA TAGGCCATCT GCAAGCTGGG GACCAGGGAA GCCATTTATG    180
TGGTACAGTC TAAGCGTCAA TCAGGAAAGC CAGTTGGGTA ACTCTCAGTC TGCAGCTGAA    240
GGCCTGAGAC CCGGAGGTCC ACTCGAG                                     267
```

(2) INFORMATION FOR SEQ ID NO:1330:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```
GAATTCGGCC TATGGCCTAA AAAAAAAAAG AAAGAAATAG GATTGATACA GGTATAGATA    60
CATAGATACA TGAGAAGGGA TTTATTATGG GAATGGGCTC ATATGATTAC AATGATTACA    120
GAGGCTGAAA ATTCCCACAA TAGGCCATCT GCAAGCTGGG GACCAGGGAA GCCATTTATG    180
TGGTACAGTC TAAGCGTCAA TCAGGAAAGC CAGTTGGGTA ACTCTCAGTC TGCAGCTGAA    240
GGCCTGAGAC CCGGAGGTCC ACTCGAG                                     267
```

(2) INFORMATION FOR SEQ ID NO:1331:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 494 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

ATGGATTGGT	TGCCGTGGTC	TTTACTGCTT	TTCTCCCTGA	TGTGTGAAAC	AAGCGCCTTC	60
TATGTGCCCTG	GGGTCGCGCC	TATCAACTTC	CACCAGAACG	ATCCCGTAGA	AATCAAGGCT	120
GTGAAGCTCA	CCAGCTCTCG	AACCCAGCTA	CCTTATGAAT	ACTATTCACT	GCCCTTCTGC	180
CAGCCCAGCA	AGATAACCTA	CAAGGCAGAG	AATCTGGGAG	AGGTGCTGAG	AGGGACCGGA	240
TTGTCAACAC	CCCTTTCCAG	GTTCTCATGA	ACAGCGAGAA	GAAGTGTGAA	GTTCTGTGCA	300
GCCAGTCCAA	CAAGCCAGTG	ACCCTGACAG	TGGAGCAGAG	CCGACTCGTG	GCCGAGCGGA	360
TCACAGAAGA	CTACTACGTC	CACCTCATTG	CTGACAACCT	GCCTGTGGCC	ACCCGGCTGG	420
AGCTCTACTC	CAACCGAGAC	AGCGATGACA	AGAAGAAGGA	AAAAGATGTG	CAGTTTGAAC	480
ACGGCTTACT	CGAG					494

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGGCC	TTCATGGCCT	AGCTGATATT	ATTTCTGAGT	TTTGTCTTAT	TTGCTTTCTA	60
CATAGAATCA	ATAAAATTGA	CAACTAGCAT	TGCCTATATA	TGCAGGTGTG	ATACTATTCA	120
GGGTACTAGT	ATATTGGCCA	CTCATTATGA	AACTTTCAGG	TCCTCATATA	TTTTCTTTTA	180
TTACAATGAT	CTACTTATTT	CTGATAAATA	TTGGATTCAT	AGAGGCTAAA	GGGCTGGGAA	240
AGGAAAACAT	TCGTGACTAC	TTACAACCAT	TTGATACGAG	TTGTGTCAAT	ACAGACCTCA	300
CACAGCAGCA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCGGCC	TTCATGGCCT	AGCTTTTCTA	GCCTTTCTCA	AAGAAATGCA	AACAGCTTGT	60
GTTTTTTCCC	CTTGGGTCCT	ATTGTACCTA	CTTTTGTTTG	ATGGTCTCTC	TGTCTCCCAT	120
GATGCCAGTG	AATGTAGCAG	TTTCTCTCCA	CTTCCACCAG	TGCCTGGGGA	AAATTTGGTA	180
TTGGCAAATT	TGAGTTCTGC	CTTTTGCAG	CTTGCAATTG	TGGATTCAAC	CTTAGGAGCC	240
TCAGTTACCC	TCGAG					255

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GAATTCGGCC TTCATGGCCT ACTCTTCCCC AAAAGGAAGC ATTTACTCTG CCTCTTACAG	60
TGCAGAGTGA CAGAATGGAC ACAGAAAAAC ATAGGTGGGT CAGAACAGAT CTCAGTTTGA	120
ACCCAGTAGC TACTGGCTAT AGGGTCTCTG GGCAAGTGAT TTGACCTCTC TGCCTCTGT	180
CTTCTCAAAT GTAAAAACGG GTCAGGCGCA GTGGCTCATG CCTATAATCC CAACACTCCG	240
GGAAGCCAAA GTGGGAGGAC TCTCGAG	267

(2) INFORMATION FOR SEQ ID NO:1335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 463 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAATTCGGCC TTCATGGCCT ACAAATGTAA AAATAACTGG GCACTGAAGT TTTCTATCAT	60
ATTATTATAC ATTTTGTGTG CCTTGCTAAC AATCAGAGTA GCCATTTTGG GATATAAAGT	120
TGTAGAGAAA ATGGACAATG TCACAGGTGG CATGGAAACA TCTCGCCAAA CCTATGATGA	180
CAAGCTCACA GCAGTGGAAA GTGACCTGAA AAAATTAGGT GACCAAAGT GGAAGAAAGC	240
TATCAGCACC AACTCAGAAC TCTCCACCTT CAGATCAGAC ATTCTAGATC TCCGTCAGCA	300
ACTTCGTGAG ATTACAGAAA AAACCAGCAA GAACAAGGAT ACGCTGGAGA AGTTACAGGC	360
GAGCGGGGAT GCTCTGGTGG ACAGGCAGAG TCAATTGAAA GAAACTTTGG AGAATAACTC	420
TTTCCTCATC ACCACTGTAA ACAAACCTT CCAGGCACTC GAG	463

(2) INFORMATION FOR SEQ ID NO:1336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GAATTCGGCC TTCATGGCCT AAATTCTAGA CTGCATCGA GGGCGGGCAG CTGATGATGA	60
CCAGCTTCGA GAGGATGCTG TCCAGAAAGG ACNTGGAGAT CGAGGAGCGC CACAAGCGCC	120
ACAAGGAGAG GATGAAGCAA ATGGAGAAGC TGAGGCACCG GTCCGGAGAC CCCAAGCTCA	180
AGGAGAAGGC GAAGCCGGCA GACGACGGGC GGAAGAAGGG TCTGGACATT CCTGCTAAGA	240
AACCGCCGGG GCTGGACCCT CCATTTAAAG ACAAAAAGCT CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 255 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

CTCGAGGGTT	TTGTTTGGC	TGGTTGTGTG	TACACAGTGT	ATACAAGTTG	AGTTGTACAG	60
AAGCCCAAGA	AAGAGCAAGA	GACAAAGGGT	AGTGGGAGCA	GGGGGTGGGG	CGGGGGCGAG	120
AACGGGGAGG	AGGGGAAAGG	AGACCGATAA	AAAATAGAAC	CACATCCAGA	CAACAATGGG	180
GGATGGGCAG	TGGGTGGGGG	CCAGACACAG	ACAAATCGCC	GTAGAAAAGG	AGTGGGAGGG	240
GCAGAGAGTA	GAGGG					255

(2) INFORMATION FOR SEQ ID NO:1338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

GAATTCGGCC	TTCATGGCCT	AAGAGAAAGC	ATTTTAACTT	TTATAGTAA	CAATAAAAAA	60
GCCTCATAAA	GCTTCTCACA	ACAACCTCAT	TCGTTTCAGA	AGTTAAGATA	TATTCCTTAT	120
GAATACCAAC	ATTGTGACAT	TTGTGTTGCC	AATTATTTTC	TCTGGAATCA	TTCTTTTAAC	180
TTCACCTCCT	GTTGTTTGGG	AAGACTTTGC	AGAGAACATA	TTTTTAATAG	GCTATAATCA	240
CACGGGCAAC	AGACTCGAG					259

(2) INFORMATION FOR SEQ ID NO:1339:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

GAATTAGAAG	TATTGTTTAA	TAAGTCCTTT	TTTTCTACTC	AACATTAAGT	AGTAATCAAC	60
TTTACCTCC	GCCAGTTTTT	CTGCTTTTTT	GCTGGTACGA	TCTCTCTTTC	TAAATTGAAT	120
CAAAGACCTA	GGTGGAAGT	GAAACTTAGG	AGGGAAAGAC	AAAATGAGGC	TTGTTTCATGA	180
TCAAATCTG	TGTACTCTAG	TTGCTTCTTT	CCCTTGGAGT	GACAGGTACT	TTTATATCCA	240
GGATGATTAC	AGTGATGACA	TCCATTCTTT	TTTGGGGGCC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 240 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTCGGCC	TTCATGGCCT	AGGAATCAGT	AGTGTACTTT	GATTGTATTG	TATAAGGTAT	60
TTTCAAATAG	AAAAGCAGGT	AGCAGAAATA	CTAAAAGAAT	TTTTTGCTTT	AGTGTAAGT	120
AGATAATGAG	AGGTAGATGC	CTAATTTCTT	AGTTTTCTTT	TTAAAATTAT	GCTAAAAATAT	180
ATCATATCAT	TTACCATTTT	GACTATTTTA	AAAGTATACA	GTTCCGTGGC	AAGTCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1341:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

```
GAATTCGGCC TTCATGGCCT ACAAATTGT GTCTTTTTTT TGGCAATGTT GTCTTGCCAA      60
TCCCATCCCT CCCCAGCTC TCCGAACAGC AGGATTTCCC AACGGCAGCT TGGGANAAG      120
ACCCAGTGGC AGCTTGGGGA AAAGACCCAG CGCTCCGTTT AGAAGCAACG TGTATCAGCC      180
AACTGAGATG GCCGTCGTGC TCAACGGTGG GACCATCCCT ATTGCTCGGC CAAGTCACAC      240
TCGAG                                         245
```

(2) INFORMATION FOR SEQ ID NO:1342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 134 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC      60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCCT GCTCCTGTAA CAAAGCCAAC AAGCACAAGC      120
CACCGCATCT CGAG                                         134
```

(2) INFORMATION FOR SEQ ID NO:1343:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 381 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

```
GAATTCGGCC AAAGAGGCCT AAAAAGCTTC CAGCAGCAGA TGCAGAATTA CCTTAAAGAC      60
AACAAAACAG CCACTATTTT GGACAAATTG CAGAAAGAAA ATAAGTGCTG TGGAGCTTCT      120
AACTACACAG ACTGGGAAAA CATCCCCGGC ATGGCCAAGG ACAGAGTCCC CGATTCTTGC      180
TGCATCAACA TAACTGTGGG CTGTGGGAAT GATTCAAGG AATCCACTAT CCATACCCAG      240
GGCTGCGTGG AGACTATAGC AATATGGCTA AGGAAGAACA TACTGCTGGT GGCTGCAGCG      300
GCCCTGGGCA TTGCTTTTGT GGAGGTCTTG GGAATTATCT TCTCCTGCTG TCTGGTGAAG      360
AGTATTGCAA GTGATGTCTGA G                                         381
```

(2) INFORMATION FOR SEQ ID NO:1344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 486 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GACCAGATGG AANGGTCACC GAACAGTTCT GAGTCATTG AGCATATAGC TCGATCTGCA	60
AGAGATCACG CAATTTCCCT TTCTGAGCCT CGTATGCTGT GGGGGTCAGA TCCCTATCCT	120
CATGCTGAGC CTCAACAAGC AACTACTCCC AAAGCAACAG AAGAGCCTGA GGATGTAAGG	180
TCTGAAGCTG CGTTGGACCA GGAACAGATT ACTGCTGCTT ATTCTGTAGA ACATAATCAA	240
TTAGAGGCTC ACCCAAAGGC AGACTTTATC AGAGAATCAA GTGAGGCACA AGTACAAAAG	300
TTTTTAAGCA GATCTGTGGA AGATGTTAGA CCTCACCATA CTGATGCAAA TAATCAGTCT	360
GCTTGTTTTG AAGCACCTGA TCAAAAGACC TTATCCGCTC CTCAAGAGGA GCGGATTTC	420
GCTGTAGAAA GTCAGCCTTC CCGGAAAAGA AGTGTTCCTC ATGGATCTAA CCATACGCGC	480
CTCGAG	486

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 243 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCTAGA CCTGACTCGA GGTGCTGGAA TTACAGATAA AAGCCACCAC ACGCAGCCCA	60
CATAAAGTGT TTATGGGAGC AACTAACAGT TGGTTTGAGC GCAGCCTAAA TAGGGGATGG	120
CAAGGTTGGG TTTTCCAAGG TTTTCTAATC TTTCTATTTC TTCTAGTGAG TCTTCAGGTT	180
ATTATGACTT GTGTTACCAG ACTATCAACA AAAGTGGGTA CCTCTTTAAA TCAGAGCCTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 294 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCTAGA CCTACCCCAT CCACATGCAC AGCCAGCTGG ACCACCTTAG CCTCTATTAC	60
TGCAGGTGTA CTCTGCCAGA GAATCCAAAC AATCACACCC TCCAGTACTG GAAGGACCAC	120
AACATCGTGA CAGCAGAAGT CCACTGGGCT AACCTGACTG TCAGTGAATG CCAGGAGATG	180
CATGGAGAGT TCATGGGATC TGCGTGGGCG CATCATGGAC CCTACACTCC TGATGTCCCTC	240
TTTTGGTCCT GTATTCTCTT TTTCACCACC TTCATCCTCC CAAGCACCCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 240 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

```
AGTTTCTCCA TTTTAGAATT TTGTTGTCCT CCTTAATCAT CTGCTTACCT AGTCATTACT      60
CAATCTGCAG AAACCTCATA AAGGAAAAGT GCTGCATTGT TTTTACAAAT AACAGTTTGT      120
AGGGAAAATA TGACAAACCT CAACTATGGG AGTTGTCCAC AATACAAAAT TTTGAAAAAA      180
CATTACATAG TGATAATATC ATAATTGGTT GTTAGGCTTG TTGCTTCCCC ACCACTCGAG      240
```

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

```
AAGTATTCTT TCAATTGCAA AGTGGCAACA GCTTTTATAT GCTAAGTCTG ACAAGTTTGC      60
AGTCAGTGAA TGATGGCACA TGGCACGAAG TGACCCTTTC CATGACAGAC CCACTGTCCC      120
AGACCTCCAG GTGGCAAATG GAAGTGGACA ACGAAACACC TTTTGTGACC AGCACAATTG      180
CTACTGGAAG CCTCAACTTT TTGAAGGATA ATACAGATAT TTATGTGGGA GACAGAGCTA      240
TTGACAATAT AAAGGGCCTG CAAGGGTGTC TAAGTACAAT AGAAATCGGA GGCATTTATC      300
TCTCTACTT TGAAATGTT CATGGTTTCA TTAATAAACC TCAGGACGAG CTCGAG      356
```

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

```
GAATTCTAGA CCTGCCTCGA GACCTTTCTC CTGGTCTAAT GCTCCTTTTA AGGAAGGTGG      60
AAGGAACAAT GGAAGAATGC TTGTAAAGTA ATGTATTCTT AAGAACTAAA GCTATTTGCA      120
GAAGGGCCGA AGCTATGTGG TGTGAAAGGG AAATGAAGAG GGTGAGTTGG GGGGCTCGAG      180
```

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCTAGA	CCTGCCTCGA	GCTTCCCTG	ATCTTCTTCC	ATCCCTTACT	GACAGTGT	TTT	60
ACCAAGGATT	TCCCTTGGCC	TGCTTCTTTC	TTTGACGCTC	ATTAAACCT	TTCCCTTCAG		120
TTGCAGACCT	CGTCTGCTTC	TCCCAGCTAT	TCCATTCTTC	AGTTGCTTGT	TAAACACGGC		180
CCACCATCAC	CTCAAAAATG	ATGTAAAT	GTCCCATTT	TTTATCAAAC	TTAAGTTTCT		240
TCCTGTGGAT	CTGTTGCTCA	GTA	CTTCCGATC	ACTCGAG			287

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGGCC	TTCATGGCCT	AAAAAATTCT	TTTTTAATGG	GTTTAAACA	CTAACACTGA		60
GAATTTTCT	TGATTCCCAT	CTGTTGGTTT	ACTTGATTGC	TATAGCTGTA	TGGTAAATCT		120
CAAAATTAGG	TAATGTGATT	TCTTTTTTCT	TACTATTTT	ATTTAAAT	CATTTAGCAT		180
TCCTAGTTTG	ACTTTCCATA	TACACTTTAG	GATTGGTTT	TCTGTTTTTC	AAATATTCTT		240
GCTTGGATT	TGATAGAAAT	TGAGTTAAAT	CTATAGATCA	ATGTGTTGGA	AATTGGCATC		300
TTAGTCTTCC	AATTCATGAA	CATAGCCTAC	TCGAG				335

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGGCC	TTCATGGCCT	ACGTATGAGA	CAGTGATAT	GACACTGTAT	ATGTGTGAGA		60
CTGTGTGTGT	GAAACACTAT	ATGACACTGT	ATATGTGTGA	CACTGTATAT	GACACTATAT		120
GTGGAGACTA	TGTGTGAGAC	ACTATGTATA	TGTGACACTA	TGTATGTGTG	TGACACTGTG		180
AGAGACACTG	TGAGACACCA	AGACAGTATA	TGTATGAGAC	ACCCTGTGTG	TGTGACACAG		240
CGTGTGACTG	TGTGAAACAT	GCTCGAG					267

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC	AAAGAGGCCT	ACCCAGAACC	AGTTATACTG	AGGGTCCTGA	GATCTGCTAT		60
AACATCACCA	TCCTTTCAAC	CCAGAGGTGT	GTGTTTGTGG	GCCATTCATT	TGGCCCTCAC		120
CACATCCTGC	CTTGATTGTC	TAGTTTATCT	TTTTATTGTC	TTTGTCTCC	CCCAACCTCC		180
TGCGCCATAC	AGACTCCTCG	AG					202

(2) INFORMATION FOR SEQ ID NO:1354:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

```
GGTTTGGATA TCCTGAAAGA TCAATGGGCA GCTGCAATGA CTCTCCGCAC GGTATTATTG      60
TCATTGCAAG CACTATTGGC AGCTGCAGAG CCAGATGATC CACAGGATGC TGTAGTAGCA      120
AATCAGACGA GCAAAATCA AATTAAAGTA GATCTGTAG ATGAGAATT TACAGAATTA      180
AGAGGAGAAA TAGCAGGACC TCCAGACACA CCATATGAAG GAGGAAGATA CCAACTAGAG      240
ATAAAAATAC CAGAAACATA CCCATTAAAT CCCCTGATC TCGAG                        285
```

(2) INFORMATION FOR SEQ ID NO:1355:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

```
GAATTCGGCC TTCATGGCCT AGTTATTTCTG TCACTGTCGC AAACAGCAGG CAAAGTTTGA      60
CGAGTGTGTG CTGGACAAAC TGGGCTGGGT GCGGCCTGAC CTGGGAGAAC TGTCAAAGGT      120
CACCAAAGTG AAAACAGATC GACCTTTACC GGAGAATCCC TATCACTCAA GACCAAGACC      180
GGATCCCAGC CCTGAGATCG AGGGAGATCT GCAGCCTGCC ACACATGGCA GCCGCTTTTA      240
TTTCTGGACC AAGTAAAGAT GGGTCCGTGG CCCACACTCG GTCATGTGCT CAGACAACAA      300
CTCGAG                        306
```

(2) INFORMATION FOR SEQ ID NO:1356:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

```
GGAATGATGT CACTCACGTC CAGCAAAGCC AAAGAGCTGA AGGACCGGCA CCGGGACTTC      60
CCAGACGTGA TCTCAGGAGC GTATATAATT GAAGTAATTC CTGATACCCC AGCAGAAGCT      120
GGTGGTCTCA AGGAAAACGA CGTCATAATC AGCATCAATG GACAGTCCGT GGTCTCCGCC      180
AATGATGTCA GCGACGTCAT TAAAAGGGAA AGCACCTGA ACATGGTGGT CCGCAGGGGT      240
AATGAAGATA TCATGATCAC AGTGATTCCC GAAGAAATNG ACCCACAGGC TCTCGAG      297
```

(2) INFORMATION FOR SEQ ID NO:1357:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs

- (B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

GTCCCGCTAA ACCGGCAGGC GATGAGAAAG GAAACCATCA CTAAGATGCT CTGGAGTACC	60
CGCACCTGT TGAATATCAC CAAGGAGCAG GTACCACTTG TGGTGGAGGA GTACCTGGAC	120
AATGTCAATG AGCATGACTG GAAGATGCTA CGAAACCGTA TGATGGACAT AGTTCAAGAT	180
GCCACTTTTCG TGTATGCCAC ACTGCAGACT GCTCACTACC ACCGAGATGC CGGCCTCCCT	240
GTCTACCTGT ATGAATTTGA GCACCACACG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1358:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 244 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

GAATTCGGCC TTCATGGCCT AGGGGAGCAT AAAAATACAA AAAACATTG GCTTTATTCA	60
CAACGTATTT TGTGAAACT CAGGAATAAC TCTTTGAATT TTGGGGAAAC CAACAACATT	120
CTCAAAACG ATGATAATCA ATTTTATTGT GCACCTCTGC ACCCTGCCTC CATGGTCCCA	180
CCACCAGGTT CCCTCTCCTC CACAGTCAGA AGTTCCTCCC TGCATTCAAA CACTGGGTCT	240
CGAG	244

(2) INFORMATION FOR SEQ ID NO:1359:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

GCGATTGAAT TCTANACCTG CCTCGAGGAC CCAAATATTT CTTTGAGATC TTTCTTTCAA	60
TTCTTTTGA CATATACTCA GAAGAGAGAT CATTGGATTA TTTTTGT TTTCAGAAAC	120
TGCCTACCGT ATTCCAAAGC AGCTGCACCA TTTCACATTC CCACCAACAT TGCATCAGGG	180
TTCCAATTTT CCCACATCCT TGTCAACATT TGTTATGTTG TTTTTTGT TTTGTTTTTT	240
TTTGTTCGC TTTGTTTGT TTTGTTTTGT TTTGTGCACA CAGTCTCGCT CTGTTGCACA	300
GGCTGGAGTG CAGTGGTACA GATCTCAGCT CACTGCAGCC TCTACCTCTC CAGTTCAAGC	360
AATTCTCCTA CTCAGCCTC CCCGGCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:1360:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```
GAATTCGGCC TTCATGGCCT ACATTTTTTT CCTAGTATGG ATATGCTTAT TAATGCACTT    60
GTTTCAAAAT CCCAAATTGC ACAAATGTGT TAATATTTTA AGAAACAAAA TGAATCCTAC    120
AAGGAGAATG ATTTTGTAGC ACACATAGGG TTGGATCTTG AGAGTGACCT ACAGAATAAA    180
AGTACTTTTA AAATAAGTA GTCAGAGGCT ATTCAAAGGG TAAAATAATC ATAGTACCAC    240
ATTGGTCCAC TTGACACTCG AG                                         262
```

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```
GAATTCGGCC TTCATGGCCT AGACAACCTG AACTGGATG ACATGCTGAG TGAAGTCAGA    60
GACAAATGGG ATACCATATG TGGAAAATCT GTGGAAAGGT AAAATGTTCT TTAAGACAGT    120
TTGGTTACTC TGTAGACCTC TTCAAATAC ACAGTAATGG TGCTTTCGGG GGACATTTTCG    180
GGAACCTTAA ATATTTCTT TGCCTGAGGA ACTTCTGCTT GTCCTAAGTA TCCACACAC    240
ATAGCACTCG AG                                         252
```

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```
GAATTCGGCC TTCATGGCCT ACATAGCAGT ACACAGAAAC TCATCTTTGG TCTTAAACT    60
GCATAGGTAC TTTAGTCCTC TGTGACAAA GTTGGGTTG TTTAGTCTT CTGCTATCAC    120
AAATAATGCT GCAAAGAATA CATTGTGTC TATGTCATTT CATCCTTGGC AATTTTGCCT    180
CTGGAAAGTT CCTAGAAGTC AGATTCCCAG GTCAAAGTT AAATGCGCAT GTAATTTTGC    240
TGGATATTGT TAAATCCCCC TACAGAGCAT GCACCACTCA GCATTCCCCT CAGCTCGAG    299
```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

GAATTCGGCC	TTCATGGCCT	AGCGAGATCT	GCGTGAAAAA	TACAGCAATT	TTGGCAATAA	60
CTCTTATCAC	TCCTCAAGAC	CCTCATCTGG	ATCCAGTGTG	CCCACCACCC	CCACATCATC	120
CGTCTCACCC	CCACAGGAGG	CCAGGTTGGA	AAGGTCATCA	CCGAGTGGTC	TTCTCACATC	180
ATCCTTCAGG	CAGCACCAAG	AGTCACTGGC	AGCAGAGAGA	GAGAGGCGGC	GGCAGGAGAG	240
AGAAGAAAGG	TTGCAGAGAG	AGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1364:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

GAATTCGGCT	TCATGGCCTA	CCAACCCCCC	CATTTCTCCC	TTCTCCAGC	CACTGGCAAC	60
CACCATTTC	TGTTCTTTT	GTTTGTGTT	TTTTGTTTT	GTTTTTGTT	TTTTGTTATT	120
ATTATCTTC	AAGTTTTAGG	GTACATGTG	ACAACGTGCA	GGTTTGTTAC	ATATGTATAC	180
ATGTGCCATG	TTGGTGTGCT	GCACCCATTA	ACTGGTCATT	TAGCATCAGG	TATATCTCCT	240
AATGCTATCC	CTCCCCACTC	CCCCCAGCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:1365:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

GAATTCGGCC	TTCATGGCCT	AATCGGTGTC	TTGGGTAAAA	ATTCTATGAG	GATGACATAT	60
TCCATCATGT	TATTCGTTTC	ACATTTCTTT	TTGCTCAGTC	TCCAATGCAA	GCACAGCTTG	120
TGGTATAACC	TATTGTTTT	CCATTCTAAT	AACTTCTCAA	TCGATCTTCG	TGTTCTTTTA	180
CTGAGGCAAA	TAAGTGGCCA	CATACTGCAA	CCTAATGTGC	AGCAGCAACA	AAGGCAGCCA	240
CAAAGTAGCC	AACGTACATT	AACAGGAAGG	TTCTTCTTAA	GACAACTGTT	AACTCTGTNG	300
ATGCTGGCTT	TAAATTCTTC	AGGAGCTACT	TTTTCAGTTA	ATGAAGAAGG	GAATTCAGAT	360
TCAAAT						366

(2) INFORMATION FOR SEQ ID NO:1366:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

GTTGTTAGGC	TGGTGTGTT	ATGTTGCTGT	TGTTATGCTG	GTCGTGCTGC	TCCATGTTCT	60
CCAGGTGTTT	TTCCCTTTTA	TCGTACAGT	TACCCCGTAC	ACCTGACAAC	TGGACATCTG	120
CGCCTGGGGT	CTTCAGCCTA	AACACACCTA	AACCTCCAC	CAAACCCCTC	TGCTTCCGCC	180

TCCCCGTGTC TGTGAGCGCC TCCACTGCCC ATCCCTCTGC TCAGGCCCA TTTCCAGGGC 240
TCGAG 245

(2) INFORMATION FOR SEQ ID NO:1367:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 217 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GTATTTTGT GACTGAAGTC ACCTTCTAAA TAATTCTAG AATAAAATT TTATATTGAA 60
 GAAGTTGGTC TTAACCATTT TTTTTCAGG AGCATGCATT TTGAAATCAT TCTGTGGGAA 120
 GATGAAAACA AATTAGTTC TATGTCTCCC CTTTTAGAG ATGTTGACAC TTTCTTAAA 180
 TGTACCATGC ATGATTGTG TACCACCCAG ACTCGAG 217

(2) INFORMATION FOR SEQ ID NO:1368:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GGCTAGAAGC AAGATGGCTG AACTCAATAC TCATGTGAAT GTCAAGGAAA AGATCTATGC 60
 AGTTAGATCA GTTGTCCCA ACAAAAGCAA TAATGAAATA GTCCTGGTGC TCCAACAGTT 120
 TGATTTTAAT GTGGATAAAG CCGTGCAAGC CTTTGTGGAT GGCAGTGCAA TTCAAGTTCT 180
 AAAAGAATGG AATATGACAG GAAAAAAGAA GAACAATAAA AGAAAAAGAA GCAAGTCCAA 240
 GCAGCATCAA GGCAACAAAG ATGCTAAAGA CAAGGTAGGG AGTCTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1369:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 230 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GCGATTGAAT TCTAGACCTG CCTCGAGTGT TTTTAAAA CTCTCTCTCT TCACTGACAC 60
 CAGGTGTTGC TATTAATGTG CTCAAATCTC TCACTTATAA AAAAGAATAA AACCTCTCTC 120
 TTTCTAGTT ACTGGTCTGT TTATTCTTT GTAGAATGAT CTTTGGGAAG AGTGTTTTCA 180
 TTTATCCAG TCTCTTCATC TTTTATTCCT TAGTGCACTG TCATCTCGAG 230

(2) INFORMATION FOR SEQ ID NO:1370:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 254 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC TTCATGGCCT AAACAAACAA AAAGAAGAAA ACACTCAACA AAACCAATCT	60
ACATGTTTTG GACTAAAAAA AAAAATAGAG GTTGTATTCT CAGTGTCCGA CTCGGAATTA	120
TGTTGCTGCC TCTCTGTGCT TTTGGCCTCT GTGTGGCCGT GTTTTGCCAG CATGAGATAC	180
TGTCCCTCT GGAGGATTTT AGGGGAGGAA GAGCCACGTC CCCAGGGATT GGAGGAGGCT	240
CCGGCACCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCAGCT ACACTTGAGT ATTAGGAAGC CATATAGAAT TCGCAGGGTC CAACTTCATA	60
GACTCTATTC ACATTATTAG AGTAGTAGTG GGGACCGTTA CTTTTGGGAA AGGATCAGTG	120
AGACAGTATA AACTTTTGAA ATAATACATT TTTGTATTCC AGAATTATTA GATAATACTA	180
AAGCAAACCT TTTTAATGGA ACATTTTGAA GTCCTGTGTA TTTATTTTAA TTTTATTATT	240
TTTGTGAGA CAGAGTTGCA CTCACGCACG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 249 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC TTCATGGCCT ACTCGAATCA TAGTGATTAA AATAGTTGGG GTAAAGTTGT	60
AGCTTATATG CAATACTACT TGGAGGAATT CTCTACTAA TTTGTATTTA ATGTGGAAAT	120
TGTATAGTTT CATTGATTTA ATCATAAATA ATGGAAATGG TCTCCAAGAA GTTTTATTTT	180
TCATTTTTTT GCTTATACAC TCTGATTCTT ATAATACAGT GCTATAAGCT ATGCACAGAA	240
AATCTCGAG	249

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 218 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

```

CCCGTTGTCA ATCTTTGGGT TTTATTCCTT TTTAAGAAAG AAAGAAGTTC TGCTGAATTT      60
GGAAATAAAT TCTTTATTTA AACTTTCCTT CCCAGTTTTA TAGTTTCTGG TTCTGAGGAC      120
TGATGAAAAT CATCTTCCAT CAGCAGATTT TCTTGCACTG TTTGCTGTGC CCCTCAAATA      180
TAATGTCTTG GGTTTTAAGA TCGAGCAGAG AGCTCGAG      218

```

(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

```

GAATTCGGCC TTCATGGCTT GGGTCTCTCT TTCCCATTTT TGCTTCTTGT TCTCCAGAT      60
CTTCCCCAAA ATAAGCTCAG TGCCCGAAGC TTGTGTGGCT TTGGGATATT CCACTGCCCG      120
GGCAACAGGC AATCTCGAG      139

```

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

```

GAATTCGGCC TTCATGGCCT AGCAAGACGC AGCAAAAGTG GAACTTCCAA GATACTAATC      60
TGAGAAGTTT TCAACAAGAA ACAGGTTTAG AATTAAAAAT CAAAACCTCT TTTAATTGTA      120
TTAAGAGTAA ATCATATTTT AAGACAACTT TCTTTTAAAA CAAGGGACCA AAATTTAGAA      180
AGACTTTTAT AAATAATTTT AATTATAGCC AACTTAATCC CACACAAAAT GCTTTTCATA      240
AGTATTCTCT CACAAACACT CGAG      264

```

(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```

CTTAAACCCA GGAGTTAGAG ACCAGACTGG ACAATATAGC GAGACCTCAT TTCTAACCCC      60
CAAAAAAATA TACACACGCA CACACACACA CACAAACACA CACACACACA CACGCATGCA      120
AACTATATTA AAAAAACGGT CATGCTGCAT GGTTTTAT TTTGTTTATT TTTATTGTTG      180
TAATGTTACT TTATTTTCTA ATATTTTCTG TTTGCGGTTG GTTGAATCCT CAGCTGTGGA      240
ACAGCTCGAG      250

```

(2) INFORMATION FOR SEQ ID NO:1377:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```
GAATTCGGCC TTCATGGCCT AATTCCCCT TCTCTTTTTT TTTTGGTTTT GGTTAATTG      60
TAATTTTGGT TTCGTCCTGA TGTATATGGA CTGCCAGAAT AGGGGGGGTG GTGGTTTGTT      120
CGTGGTGTCT GGGGGAGGAA GGAATCCTTA CCCTGGCTTC CTTAATCGGG GAAGGCTTCC      180
TGAAGGAGGT GGGCTCAGAG GTGAGTTGTG AATGAAGCGG GTAGGGAGTG GGCTGGGTGG      240
ATGTTTGGG GATGTTGGG GGAGGTGAGT AAAGGTAAC TCGAG                          285
```

(2) INFORMATION FOR SEQ ID NO:1378:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 384 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```
GAATTCGGCC TTCATGGCCT AGAAAGAGCA AATATAATGA AGACTTTGAA AGAGCTTGGA      60
GAGAAGATCT CACAATTAAA AGATGAATTA AAAACATCTT CTGCAGTCTC CACACCATCT      120
AAAGTGAAGA CAAAAACGGA GGCCCAGAAG GAGTTATTAG ATACTGAACT GGACCTCCAC      180
AAGAGGCTGT CCTCAGGAGA AGACACCACA GAATTACGGA AAAAACTCAG TCAGTTACAG      240
GTTGAGGCTG CACGGTTAGG TATTTTACCT GTGGGTCGAG GAAAGACCAT GTCCTCTCAA      300
GGTCGAGGAA GAGGCCGAGG GCGTGGAGGA AGAGGAAGGG GCTCACTAAA TCACATGGTG      360
GTGGACCATC GTCCCAAAC CGAG                          384
```

(2) INFORMATION FOR SEQ ID NO:1379:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

```
GAATTCGGCC TTCATGGCCT AGTCAGGAAC TCCAGTTTGC TTTTCTGTTT TGTGTCCTGG      60
TAGCAGCTGT TGAGTAACTT TCATTGGAGG TTGGGAAGGA AGTGAGGAGA AAGTGTTCTT      120
GTTTAGTGTT TTATTTCTTA TAATAGGATG CTGCCTAACC CAGTTCATCT CTATGTCCTG      180
TTCACTGAAT ATTCCGGGTA ATTGAAAGAA AATATAATGG ATGGGCTCCA TTAAGACAG      240
CTCAAAAATA AATTCTTGTC AGTAAAGATT TCTTGTCAAG ATGTCTTGGA TTGCACTTTT      300
GTTGAGGAAA GACAGTGTA ATAGTTAAAG AATGTTGATA AAATTGAAAC ATTTGGGCCT      360
TCATGGCCTA                                          370
```

(2) INFORMATION FOR SEQ ID NO:1380:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCTAGA CCTGCCTCGA GTTGCTGAAC GGTTTAGATC CTCAAAAAAT AAAGCAATTG	60
AACCTGGCCA TGATTAATA TGTNTTGGTC GTCTATGGAC TTGCCATTTC TCTCCTTGGA	120
ATAGGACAGC CTGAGGAATT ATCTGAAGCC GAAAACCACT TTAAGAGGAT TATTGAACAC	180
TACCCCACTG AGGGCCTTGA TTGCTTGCC TACTGTGAA TTGGAAAAGT ATATTTGAAA	240
AAAAACAGAT TTCTAGAAGC TCTCAATCAC TTNGAGAAAG CAAGAACCCT GATTTATCGT	300
CTTCCTGGAG TGTTAACTTG GCCCACGAGT AATGTGATTA TTGAAGAGTC TCAGCCACCC	360
CTCGAG	366

(2) INFORMATION FOR SEQ ID NO:1381:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGGCC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA	60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCCG	120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTCCTTC CTCGCCTGGC TTGTGAAGAA	180
CGTGTTTATT GCTGTTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT	240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC	300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCCAGGGAC GCGCCCCAGC	360
CTGCCTCCAG AAAATGATGC GGTCACTCCGT TTTCCACATG TTCATCCTGA GCATGGTGAC	420
CGTGACGTG ATCGTGCGG CTAGCAACTA CTACAAAGAA GAAAACCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:1382:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 424 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC TTCATGGCCT AGAGTTTAAC CCAGAACTGG TGCTGGTCTC AGCTGGCTTT	60
GATGCTGCAC GGGGGGATCC GCTGGGGGGC TGCCAGGTGT CACCTGAGGG TTATGCCAC	120
CTCACCACCC TGCTGATGGG CCTTGCCAGT GGCCGCATTA TCCTTATCCT AGAGGGTGGC	180
TATAACCTGA CATCCATCTC AGAGTCCATG GCTGCCTGCA CTCGCTCCCT CCTTGGAGAC	240
CCACCACCCC TGCTGACCCT GCCACGGCCC CCACTATCAG GGGCCTGGC CTCAATCACT	300
GAGACCATCC AAGTCCATCG CAGATACTGG CGCAGCTTAC GGGTCATGAA GGTAGAAGAC	360
AGAGAAGGAC CCTCCAGTTC TAAGTTGGTC ACCAAGAAGG CACCCCAACC ACCCAAACCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:1383:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 494 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

```

GAATTCGGCC TTCATGGCCT AGGCAGCGGC CTCTGTCCCA GGCCCCGGGG TGCCAGCGTC      60
CTGCGAGCAC CCAGCTGACC AAAGATGTTT CCCTCTGTAG AAGACTCTGC TAGACTGGGT      120
CTGAAGCTTG AGTTTTCTAA CAGGTGCTGC TGCACAGGTG GAAAGGAGCC GTGGGAATGT      180
GTGTGTGGCA CGGCCAGAC AAGGGCAGGG CTGAGGGCCT CCGACTCAGC TGGGGGTAGA      240
CGGGCTCGAA TGTGGCCTGG GAGAGCCTAG GGGGCCCCAG GGTCTGCTT TTCTATGTGA      300
GCCTTTAAAC TTCAGACAGG CCACCACCCT GCACCTGCAG GGGCTTTGGC ACAGGAGTGC      360
TGGCTTTGGA GGGACTGTGG CCTTCATCGT GGTCTCTGTC CCACACCTCC ACGCACACAG      420
ACAGTGCCCT AGGAGGGAAA CAGAACTAAT TACGAGGGGG AGGCAAGAGG ACGCCAAGCA      480
AGGAGTGACT CGAG                                         494

```

(2) INFORMATION FOR SEQ ID NO:1384:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 460 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

```

GCTCGAGAGT GGGGCGTGGC AGTGTGTGCC TGTAAGTCCCA GCCACCTGGG AGGCTGAGGC      60
AGAAAAATTG CCTGAACCCG GGGGTCGCAG GTTACAGAGA GAGACTCTGT CTCCCCAAAA      120
AAAAAAAAAA AAAAAAAAAA NNGTCTAAGG GTTANACAAT TCTGTATATA ATCTCTCCAC      180
AATACATTCA GAAATCTACT TTTGCTGTTG GAGTTGTATC TGAGAGCTGG GGAATTTAAA      240
ATTGCTGAAA ACAGATATAA GGGGAAAGTG AGATAAAGC AGAAGCTGCC AAAAGGAGGT      300
ATTAGCATCA TCCTCAATTT ACACAGAATC ACATGCTAAG AGAGGCTAAG TATCTTTCCC      360
AAGATTACTC AGCCAAGTTG TGAAGCCAAG ATTTAACTGT ATCTATTCAA CTCTTATCTA      420
ATTATAAAAG CCTATGTTAT TTCCCACTGT GCTACTCGAG                                         460

```

(2) INFORMATION FOR SEQ ID NO:1385:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 501 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

CGAGGAGTAT CTGAGGATGG AGAACTCAGC ATAGAAAACC CCTTTGGTGA AACATTTGGA      60
AAAATACAAG AAAGTGAAAA AACTCTTATG ATGAACACAT TATATAAGCT TCATGATCGA      120
TTGGCACAGC TTGCAGGAGA TCATGAATGT GGCAGTTCTA GTCAAAGAAC GCTTTCTGTT      180
CAAGAGGCAG CTGCGTATTT AAAAGATTGA GGTCTCTGAAT ATGAAGGTAT ATTTAACTACT      240

```

TCATTGCAGT	GGATCTTAGA	AAATGGAAAA	GATGTTGGAA	TAAGGTGTGT	TGTTTTTGGC	300
CCTGAGGAAG	AATTGACAAA	TATAACTGAT	GTGCAGTTTT	TACAGTCCAC	AAGACCACTG	360
ATGTCTTTTT	GGTGTCTGTT	TCGACGTGCT	TTTGTTACTG	TAAGTCACAG	ATTATTGTTG	420
TTATGCTTAG	GTGTAGTGAT	GGTTTGTGTC	GTTCTGCGTT	ACATGAAATA	TCCATGGACA	480
AAAGAAGGGG	AGGATCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1386:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

GAATTCGGCC	TTCATGGCCT	ACTCCAAGAG	GCAGTTCTAC	ATCAAGATCT	CAGACGTGCA	60
GGTGTTTGGG	TATAGCCTGA	GGTTCAACGC	CGACCTCCTG	CGCAGTGCAG	TGCAGCAGGT	120
CAACCACTCC	TACACACAGG	GCGGCCAGTT	CTATTCTCTT	TCGTCAGTGA	TGCTCCTCTT	180
GTTGGATATT	CGGGACCGAA	TTAATCGCCT	GGCCCCCTCT	GTGGCCCCCG	GGAAACCCCA	240
GCTGGACTTG	TTCTCCTGTA	TGCTGAAACA	CCGCCTGAAA	CTGACCAACA	GCGAGATCAT	300
CAGGGTGAAC	CACGCCTTGG	ACCTGTACAA	CACGGAGATC	CTCAAACAGT	CGGACCAGAT	360
GACAGCCAAC	ACTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1387:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 538 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

GAATTCGGCC	TTCATGGCCT	AGACGACGCC	TATGAAGCCC	TTAGTCCTTC	TAGTTGCGCT	60
TTTGCTATGG	CCTTCGTCTG	TGCCGGCTTA	TCCGACATCA	AAGGGATCAA	AATTTAAGGA	120
GCTAGTTACA	CATGGAGACG	CTTCAACTGA	GAATGATGTT	TTAACCAATC	CTATCAGTGA	180
AGAAACTACA	ACTTCCCTA	CAGGAGGCTT	CACACCGGAA	ATAGGAAAGA	AAAAACACAC	240
GGAAAGTACC	CCATTCTGGT	CGATCAAACC	AAACAATGTT	TCCATTGTTT	TGCATGCAGA	300
GGAACCTTAT	ATTGAAAATG	AAGAGCCAGA	GCCAGAGCCG	GAGCCAGCTG	CAAAACAAAC	360
TGAGGCACCA	AGAATGTTGC	CAGTTGTTAC	TGAATCATCT	ACAAGTCCAT	ATGTTACCTC	420
ATACAAGTCA	CCTGTCACCA	CTTTAGATAA	GAGCACTGGC	ATTGAGATCT	CTACAGAATC	480
AGAAGATGTT	CCTCAGCTCT	CAGGTGAAAC	TGCGATAGAA	AAACCCGAAG	CACTCGAG	538

(2) INFORMATION FOR SEQ ID NO:1388:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

GAATTCGGCC	TTCATGGCCT	ACCTATTTTC	CATATTCCGT	GTGACTCATA	ATGTACTCCT	60
GCTGTTGCTG	ACGGGCAGTG	GTCGGTCAGA	GCAGAAGCTC	AGCTGTGATT	GCTGGGGGAG	120
TTCTGAGCTC	CATGAGCCAC	TCTGGCCACG	ACACCATCTT	TACTTGAAAG	AAAAACTTCC	180
CTTTGATGCT	GAGGCCTCCA	GTGTCATAGA	CGATGCCTTT	GCCCACCCAG	GCGATGGTCT	240
GCGTGGCTCC	ATCTGGGGTG	TGGCTGAGGA	CGGCCAGGGC	TGGGGGATGC	AGGGCGGCTT	300
TGCCAACCCC	ATAGATTCTT	CCAAATCCTC	TCGTCTTCAG	TTCTCATCC	CGGATGATGG	360
TTGGGATGAT	CCCCAGCTCC	TTTCCAATT	TGTTAATCTC	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

GAATTCGGCC	TTCATGGCCT	AAATTAAGTC	TAATGGGCAA	TCATAAGAAT	AATTGAAAAT	60
AAGGAATTCA	GGGGAGCTTA	ATTCATTGT	AGGTTTtagg	TGATACCATT	GCTATTCAGA	120
TTGCTTTGGG	CAATTTATGT	AATTTTTC	AATGACATCC	AATTCATAT	CACTGTAAT	180
GAAGAAACAG	AAAATTTAGT	TCAGATTTTA	AATCATCATT	CCCTGATGCC	ACCTCATCCA	240
ATGATGTTTC	ATAAACGATG	AAATCACGTA	AGAACCACCT	AAACCAGGAC	TGATAGTCTA	300
TTGCTAGAAA	CTTGAATAA	TTTCCACTGA	TTTCTGTTTT	CACTGGAAAC	AGAACAGAGA	360
CTCCTCGAG						369

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

GAATTCGGCC	TTCATGGCCT	AAGACCAAAA	CTAAACTGAA	ATTAAAAATG	TTCTTCGGGG	60
GAGAAGGGAG	CTTGACTTAC	ACTTTGGTAA	TAATTTGCTT	CCTGACACTA	AGGCTGTCTG	120
CTAGTCAGAA	TTGCCTCAAA	AAGAGTCTAG	AAGATGTTGT	CATTGACATC	CAGTCATCTC	180
TTTCTAAGGG	AATCAGAGGC	AATGAGCCCG	TATATACTTC	AACTCAAGAA	GACTGCATTA	240
ATTCTTGCTG	TTCAACAAAA	AACATATCAG	GGACAAAGCA	TGTAACCTGA	TGATCTTCGA	300
CACTCGAAAA	ACAGCTAGAC	AACCCAAGTC	CTACCTATTT	TTCTGTCCCC	AACGAGGAAG	360
CCTGTCCATT	GAAACCAGCA	AAAGGACTTA	TGAGTTACAG	GATAATTACA	GATTTTCCAT	420
CTTTGACCAG	AAATTTGCCA	AGCCAAGAGT	TACCCCAGGA	AGATTCTCTC	TTACATGGCC	480
AATTTTCACA	AGCAGTCACT	CCCCTAGCCC	ATCATCACAC	AGATTATTCA	AAGCCCACCG	540
AGCTCGAG						548

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

GTTTATTTTC ATCATCTACA GAACCAAACCT CCCTTTTCATG TGCACGAGTG AGAATCTCTT	60
TGTACAGTGT TTCTGCTTGC TTGAACTTTC CTTGTTTCAA ATAGCAGGAT GCCAGGTTAT	120
TTTTCGTCTT AGCCACGTTG GGGTCATCAG GTCCCAGTTT TGTCTGGTAG ATCTCGAG	178

(2) INFORMATION FOR SEQ ID NO:1392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

GAATTCGGCC AAAGAGGCCT AGGGCCCTAT ACCTCCAGCC GTGAATGCCA GACTTTAAGA	60
TTGCCCGGAG GAAGCAAACCT CTTCGTATAA AAAAAGCAGG CCATCTGCTT AACCTTGGC	120
TCCACCATAA GGCACCTGGGA CTCGGATTTC TCTATCTGAT AGAGGTATTT TCTGTGGCCC	180
TGGGAGCTGT CTGTCTTTCC CCTACCCCCA AGGATGCCAG GAAGACGTCC ACCATTAGCC	240
ATGTGGCAAC CTTTACTTCT ATGCCTCACA AGTGCCTTTC AGAGAGCCCC AATTCTGCTT	300
TCCCACAAAA TAAACCCAAT GCACTCGAG	329

(2) INFORMATION FOR SEQ ID NO:1393:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

GAATTCGGCC AAAGAGGCCT ATTCCTTTCC TTTTCCCTTT GAGATTTTTT TGTGTGTGTT	60
TCCTTTTGT ATTTTACTGA TATCACCAGG ATAGTTTACT CTCCTTCTAG CTTTCTGCTT	120
ACCGCACACT GGATAACACA CACATACACA CCCACAAAAA TGCTCATGAA CCCAATCCGG	180
AGAAGGTTCC AGCAGGTCCC CCACCCTCCC CTCCTCCTCC TACTTCTCCT CTTGACAGCG	240
AGGACAGGAG GGGGACAAGG GGACACCTGG GCAGACCCGC CGGNTCTCCC CCCACCCAC	300
CCCGCCCTC GCATCATACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1394:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

GAATTCGGCC AAAGAGGCCT AACTGCAACG GAGAGACTCA AGATGATTCT CTTTTTACCC	60
ATGTTTTCTC TACTATTGCT GCTTATTGTT AACCTATAA ACGCCAACAA TCATTATGAC	120

AAGATCTTGG CTCATAGTCG TATCAGGGGT CGGGACCAAG GCCCAAATGT CTGTGCCCTT	180
CAACAGATTT TGGGCACCAA AAAGAAATAC TTCAGCACTT GTAAGAACTG GTATAAAAAG	240
TCCATCTGTG GACAGAAAAC GACTGTGTTA TATGAATGTT GCCCTGGTTA TATGAGAATG	300
GAAGGAATGA AAGGCTGCCC AGCAGTTTGG CCCATTGACC ATGTTTATGG CACTCTGGGC	360
ATCGTGGGAG CCACCACAAC GCAGCGCTAT TCTGACGCCT CAAAACCTGAG GGAGGAGATC	420
GAGGGAAGG GATCCTTCAC TTACTTTGCA CCGAGGCTCG AG	462

(2) INFORMATION FOR SEQ ID NO:1395:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 515 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCGGCC AAAGAGGCCT AGAACTGCCA TCATGAGGTC TGACAAGTCA GCTTTGGTAT	60
TTCTGCTCCT GCAGCTCTTC TGTGTTGGCT TGGGAAAGTC CTGGTGTGGC	120
CCTGTGACAT GAGCCATTGG CTTAATGTCA AGGTCATTCT AGAAGAGCTC ATAGTGAGAG	180
GCCATGAGGT AACAGTATTG ACTCACTCAA AGCCTTCGTT AATTGACTAC AGGAAGCCTT	240
CTGCATTGAA ATTTGAGGTG GTCCATATGC CACAGGACAG AACAGAAGAA AATGAAATAT	300
TTGTTGACCT AGCTCTGAAT GTCTTGCCAG GCTTATCAAC CTGGCAATCA GTTATAAAAT	360
TAAATGATTT TTTTGTGAA ATAAGAGGAA CTTTAAAAAT GATGTGTGAG AGCTTTATCT	420
ACAATCAGAC GCTTATGAAG AAGCTACAGG AAACCAACTA CGATGTAATG CTTATAGACC	480
CTGTGATTCC CTGTGGAGAC CTGATAGCTC TCGAG	515

(2) INFORMATION FOR SEQ ID NO:1396:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCGGCC AAAGAGGCCT AGTCCTTCAC TAGACTATAT GCATTTTATC TTACCTTATT	60
CCTCATTTTA GTGTCCAGTG GCTGGCGTGT ATAAACCCTG AATGTTTTTA AAGATAATAT	120
TTTAAAGAT CACTTTAGTT ATAATACGGC TTCAGTTGGT GGAATAAAGA AATTTTTTTC	180
TTTTTTTTTA TTTTGAGTAA AAATGATAAC TTCTCTCCAC CCTCTCTATA GTTAAAGCCT	240
TCCATCTGAA GTATGATGAA GTTCGTCTGG ATCCAAATGT TCAGAAATGG GATGTNACAG	300
TATTAGAACT CAGCTATCAC AAACGTCATT TGGATAGACC AGTGTCTTCA CGGTTTTGGG	360
AAACATTGGA CAGGTACATG GTAAAGCATA AATCGCACAT CTCGAG	406

(2) INFORMATION FOR SEQ ID NO:1397:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC AAAGGGGCCT AAGAATAGCA AATATCTTGT GCTTAGCAAA AAATAATCTT      60
GAAAAATTTT TCTGAAATAA ATGTTATTGA AAAATGCAAA TAATTAGAAT TAAATACCAG      120
CTGCAGTTCT ACATCCTCTT ATTGGCCAAT GTAAAGAGAA ATCAGGCATG TTAAGTCCAA      180
AAAAGGACAA TTCAACAACA TGGAAACCAT GACTAATATA TGGAGAATAC AAAGAAAGAC      240
TAAAGATTTA GATCAGGCTA ATTTCTTTT ATTCCCATCA AATCCAAGTA CCACTCGAG      299

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(2) INFORMATION FOR SEQ ID NO:1398:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

```

GAATTCGGAC AAAGAGGCCT AGGAGAGGCG GGAGCCTGGG AGAGCCTCTG CTAGACCTTT      60
CCTGGCACTT CCCAGGAAA GGCAAGGCAG GGCAGATGTG CGGCTGGCCA GCTGGAGTGA      120
TTCCATGGG CTCCAAGCTG TAGGAGTGGT CCCTGGCTGC CAGAGTGCTC TGGCCAGATA      180
CAGGTGGGCT CTGGACTGGT GAGGCTGCAT TGCAGAGGCG CGCACACCCA GCTGGGCCCT      240
TATCTGTAAG GACTGGCTGG CCTGGGAGGG GCAGTCTCCC ANCCAGAANG TGGAAATTTT      300
TTTTTTTTTT TGAGATATCA AAACATCCTA AGGTACAGGA AAGAAATTGT CNACACACAC      360
GGCTCGAG                                     368

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(2) INFORMATION FOR SEQ ID NO:1399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 149 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

```

GAATTCGGCC AAAGAGGCCT ATTTTTTGG AGATGTTGAT CAGATGTTCA CTGATAAACT      60
TGAGCCCCCT TTTCTTCCTC TGGTCTACCC ATCTAGAATG CTATGACCCA TCTCAGACAC      120
ACCCCTCTGG GAAGCTGCCT GAGCTCGAG                                     149

```

(2) INFORMATION FOR SEQ ID NO:1400:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 599 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

```

GAATTCGGCC AAAGAGGCCT AGTCGATGGA GATAAGTGTT TTAATTACTT TTTTAATGTC      60
TGTGCTTTTG TATTTTCTC CTCTCTTCC TTTTATTCC TGCTGTNGAG ATTACTGCCT      120
CATCTCCACA GCAGGTGGCT GTTGCAAATT TGTTTCTTT GTAAGCCTGG AAGATTTATT      180
TTGTAATATA ACTGTCCTT TTTAGTATTT TATTATTAAT GATTTCCTTA CTTTGGGATA      240

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TAGTGTACTT	ACACAGTCCT	AAACAGTAAT	TTCCTAACAC	TATCTAAGAA	CTCCAATCAT	300
TAAGAAAAAA	AATCTTTGCC	TGAGGCGTAT	TGTTTGAGAT	TTTGCTTAC	CCTTACTTCA	360
CAATGCGGGG	ATTAAATTT	AAGGAAATTG	TTTTATAGCA	AAAGCCAAAT	GAGAAAAAGA	420
AACAGAGAAA	ATAGAAGGGA	GGGAAATAAA	GAAAAGGAGA	AGAGAAAAGG	CTCAAGAGAC	480
AAAGTATACT	TTAATAAATA	ATACCATAAA	GCAGAGTAAT	GAGGATAAAT	TTATGGCTGA	540
AATATGAAAT	TACATTAACA	TCTTTTCTAG	AAATGTTTCA	ACTAAACCAA	ATGCTCGAG	599

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC	AAAGAGGCCT	ACAGTCACCC	TATAAAATAG	ATTAAGTGTT	CCGAGTTCGG	60
TTGGGTTTTC	CGCAATTAAA	AATTGTGTTA	ACAGTTTAGT	GTTTCTTACA	GATAACACTG	120
ATAACACTTT	TTTGTTTTCA	TTGGGTCTTA	TCATTGGTAC	AGACTGATCC	AAAAATCCAA	180
TTGGCTTGCT	AGTAATTTT	TCCTGTGAAT	TGCTAAGATT	TATGGGTAAA	TTAAATTTTC	240
TTTTTCTTTT	CTTTTTTTTT	TTTTTAAGCA	TTTGCTCCTT	AAATGCAAAT	CGTACCACTA	300
AGATCCTCTC	ACAACAGATT	AAGGTCGAAT	TTGCAGAGAC	ACTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC	AAAGAGGCCT	ATATAAACTC	AAC TTTTCTT	TGTCTCTCTT	GCCTGTGATG	60
AGTAACAGAA	ACCATCTTCC	CAGAAACTAT	CCCCACCCAC	CCCCAGCCCA	GCCCCAGCAG	120
CCCAGACCCA	GGAAGGAGGT	CAGAGCCTGC	GTGACTGTGT	GGCAAGGATC	CCCCTCAAAG	180
CAGGCAGTGA	TCCCCCTCAA	AGCAGGCAGT	GATGACCAGG	CTCCCCAGGG	GAAGGAAAAA	240
TGGTTGATTA	CCCCACCTCA	CTTTCTCAAG	TTCTGAAAG	CCTCCCATCT	TTTCAGGATG	300
TTTTCTTCT	GCTTCCTTTC	TGGGGTGATA	TTGCAATGCA	TGTGTCAGTC	CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC	AAAGAGGCCT	AAGGATTGTC	ATAGCCAGGA	CCACACTATT	GCTTTTTTCAT	60
AACATTTTCT	TTTTGTTTCT	TTCTTTTGAA	TTTCTTACAG	GGCTGCAAAG	TATGCCAGGG	120

GAGTATGTAG CCCGGGGTGG TCCAATGGGT GTGAGTATGG GACAGCCAAG TTATACCCAA	180
CCCCAGATGC CCCCCCATCC TGCTCAGCTG CGTCATGGGC CCCCCATGCA TACGTACATT	240
CCTGGACACC CTCACCACC AACTCTCGAG	270

(2) INFORMATION FOR SEQ ID NO:1404:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC AAAGAGGCCT ACAGCCTTTC TTCCCACTTT TAACTATAGA ACTTGCTTTT	60
AATTTCACTG ATATATGGAC ACAGTCAGAC GAGAACTCCT TCATGCTCCT ATTACCACAG	120
CTACTCGAG	129

(2) INFORMATION FOR SEQ ID NO:1405:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC AAAGAGGCCT AATTGCTTAA GCTCCTCAAG TTCTTTTTAT TAAGAGTTGT	60
AAGTAAAATT TAATAAACAA TAACATAGTC TCTGCTATTT TGATCCTTGC TCTTTGCCAT	120
GCTGTTTTAC TTATTCTTTA TTGCATGTTT CACATCTATC AATTTTGGGA TATGCTTCTC	180
ACCTTCCCTA CTAAATGTG AGCTCCGTAA ACGCAACAGC TACCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1406:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 398 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC AAAGAGGCCT AGTGGAGGTA TTTTGAAAAT ACAATTTAAC TACAACAACA	60
TTTGCTTATT TTTAGAGTCT TTTATGACAT CAAGAGAAAT GATCCCAGAA AGAAAAAATC	120
AAGAAAAAGA ATCTGATGAT GCCTTAACTG TGAATGAAGA GACTTCTGAG GAAAATAATC	180
AAATGGAGGA ATCTGATGTG TCTCAAGCTG AGAAAGATT TCTACATTCT GAAGGTAGTG	240
AAAACGAAGG CCCTGTAAGT AGTAGTTCTT CTGACTGCCG TGAAACAGAA GAATTAGTAG	300
GATCCAATTC CAGTAAACT GGAGAGATTC TTCAGAATC ATCCATGGAA AATGATGACG	360
AAGCCACAGA AGTCACCGAT GAACCAATGG AACTCGAG	398

(2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCGGCC AAAGAGGCCT AGTAAAAGTG TCTGATCTGA AACATAATAC CCTCCCTTTT	60
CAATCCTGAT GTACCTTCTT CTAGTCTTGG TCTTTGGCAC CTTTTTTTCA AGAAGAAACC	120
ATACTCTCGA G	131

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 622 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC AAAGAGGCCT AAGTCCAGGC TGTAGGGTCC CTGGTCACAG AGGACCCGGG	60
TCACCCGGGA CTCATCTTTC ACTTATTGTT TTTCAAGTCC AGGGCCCCAT GGATGCCACT	120
GAGATGATT CAGATGTTAC AGTCATCAAG AGGGATTGGG GCCGCATTCT GCCTCATTCC	180
TTGGCTTTTG AAATCAGAGA CGACATTTTC ACTTTAAACA AACCCAAACC ATTCCTGCTG	240
GTGGAGGATT TCTCCTGCAT CTCGGGGGTG GATTTTCACT GATTTATGTC TGCAGCGTGA	300
GCACTCTCTG GGCTTTTCTG CAGCTCCAGA TGTTAGATGT TTTATCTCTC CGTCTTTTAT	360
CNGCTTCAGT CCTTGCCCCA GTCTATCCTC GCATGCTCCN TCCTNNGGGA GGGCTTCCTG	420
TCTTCACAGC CGCACCTTCC TCCCACTGCT ACCAGTGCCA TGGACCCACT GTATGTTTCC	480
TGGGGGCCAT GCAGAAGGTC CCCAGACCAG TGCTGGCCTG CGACAAATAA GTACAGAAAT	540
GGAGAATAAC CCCTTTCAAA CACATAATAG CATTTGATAG AATCAATCAG GAGACTCAAG	600
TTTTTACTGC GTGCGTCTCG AG	622

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 328 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC AAAGAGGCCT AGAACATGCA GATTTTTCCT CTAGAAAACC CCCTCCCCAC	60
ATTCAGCTTA TTAGAAATCC TTAACAGCAG GTAACCACCA ATGCTCCTGC CTTCTAGCCA	120
CAGTCTGCTC CTGCCCCTAC AGGCTTTGAA CATGCAGATT TTTCTCTAG AAAACCCCT	180
CCCTGCATAT TCTCTCCTCT CCCCACTCAC ACAAACACCT GGCCTGCCAG GCCCCGTGGG	240
GCTGCCGGGC TTCTGTGAAC CTGCCGCCTG CCTTGAGCT TCGGCCTATG CCTCTGCCCC	300
CCTTACAGAG CCTGGATCCA AACTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1410:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 324 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

```
GAATTCGGCC AAAGAGGCCT NNAAAAAAAAA AAACCAAAAA AAAAGAAAA GCTGACACAG      60
TTCTCTGAAA AAAGCCTAGA GAACACAAGG GTGACACAAA CTCCAGAGAG TATGCTGCTT      120
GCAGCTTTGA TGATTGTATC AACAGTGGTA AGTCACCCCA TGTCTGCAGG AGCAGCTGCA      180
GCTAATTATA CCTACTGGGC CTATGTGCCT TTCCACCCCT TAATTGCGGC AGTCACATGG      240
ATGGATAATC CTATTGAAGT ATATGTTAAT AATAGTGCAT GGGTACCTGG CCCCATAGAG      300
GATCGTTGCC CAGCCCAACT CGAG                                     324
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(2) INFORMATION FOR SEQ ID NO:1411:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 323 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

```
GAATTCGGCC AAAGAGGCCT AGAAGTTGAG TGAAGGAGAA AGAGAGGGAA GTAGAAAAGA      60
GGAGAAAAAT GTTAAGCAAA AAAGGTATTT TCCCTTGGAT ATTAAGTTGC ATATCTGAAG      120
AAATGGCATT CCGGACAATT TCGTGTGGT TGGAGTATT TATTTGTTCT ATCTGTGTGA      180
AAGGATCTTC CCAGCCCAAA GCAAGAGTTT ATTTAACATT TGATGAAGTT CGAGAAACCA      240
AGACCTCTGA ATAATTGAGC CTTTCCACC ATCCTTTAGA CTACAGGATT TTATTAATGG      300
ATGAAGATCA GGAACAATC GAG                                     323
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(2) INFORMATION FOR SEQ ID NO:1412:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 149 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

```
GAATTCGGCC AAAGAGGCCT AGTTAGTTGC TCTCCTTTT TCTTTTTTTT GTCGTGCATA      60
TTTTATTCTG TAGTTTCTG GTTAGCTACC CTAAAGTGAT TTAATAATTT AGAATGCTTT      120
GTGTTTCTTA TTTGGTAATC AACTTCGAG                                     149
```

(2) INFORMATION FOR SEQ ID NO:1413:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

GAATTCGGCC	AAAGAGGCCT	AATAAGAATT	ACTTGTAAC	TTAGGGGGCA	TTTAGAATTA	60
TATTGTCTT	ATTTGAGATT	TGGATTTAAA	TTTTATTTTA	GAGCATTTTT	TAAAAAATAA	120
ATAGAAGTGA	GGCTAATATT	GTTAATTATT	CTCTTTAAAA	AATACAGTAT	TTGCTTTGGG	180
TTAAAATTTT	CTGCCCCAAC	ATCATTATCA	AGAGTCAGCA	TATTACAATG	ATAAATTTAG	240
CATTACTGT	GTGGCAGGCA	TTGTTCTATA	TACTTTATTC	GTTAAATTCA	CCAGCGAACA	300
CGCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

GAATTCGGCC	AAAGAGGCCT	ACTCAGAGCT	GTTACGACTA	GTCAGAGAGA	GCGAGGTGGC	60
TGGTTCATGT	TTGCAGATAG	AGACCTCACT	GTGTGGTGGA	CTTCCCCACT	TCCTGCTGCC	120
TTCATCCTGA	TGGGTGGCTG	CCTTCATCCT	GATGGGTGGC	AGCCTTGCCC	TGCAGTGGGA	180
GACCCAGGTA	ATGTAGTTTT	TTGTTTTGTA	TCCCTGATCT	CTTCTTGCAG	TTTTTGCCGG	240
GCAGGTCTCG	AG					252

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

GAATTCGGCC	AAAGAGGCCT	AGTGATTGAG	AACCATTTGA	TAATAGCTTG	AAAGCCTAGA	60
TNGACTCTCT	GCATTGCCAC	CCCTCCCTAT	TCTCTTAAGC	CCACTCCATT	CACGCTGTCA	120
TCCACACCAC	TCGGCCACCA	ATTTCACT	GCCAAATCCA	GTTCCCAGTT	CCTCATCGTG	180
TTTATTTGCA	ACATTTGAAA	CAAGTGATCA	ATCCCTTTTC	CATGAAAAAC	CTTCTTTGCA	240
CAGTTTCCAG	AATTCTAAAC	TTTCCTGGTT	TTCTCTCTAC	TTCAACTTTC	CAATTACCGT	300
CCCTCATTTT	TACCTCATCA	GCCCAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTCGGGC CAAAGAAGCC TACAANAAAN TATATATATN TGGATCTTCT GAAAAGTTTT	60
TTGAGGTGCA AGTTTTCTCT CTTTTTTTTT TTTTTTTTTT TTCTCATTGA TTAATGGACA	120
TGATGCTGAG ATTCATCAC TACATGAAAC ACCTGGCTGT GAAAACAAA CAACCCAGAG	180
GGCTGTGTTC CAAGCAGCGC TGGGGAAGCT ACGTAACAGT CGGATGCCAG TTTTGAAGA	240
TTCACCATGC GTTCTGACCC TCTGTTCGTC TCTTCTCTT CCTCTTTCTT CAAGAAGGAA	300
ATTGATCCTA GTGATTTTCTG CCCATGCATT AAACAGGAAA CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGCCA AAGAGCCTAA GGGCAAGCAG CATTATATA TCATATGACT TCTACAACTA	60
AAATGAAGCT ATTAGACTA GTATTTAGTA ATCTAGTAAC TCTCCTTCCA GCCCTCTTCA	120
CCCTCGAG	128

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATTCGGCC AAAGAGCCTA GGGAAGCGCT CTTCACGGCA CTGGGATCCG CATCTGCCTG	60
GGATCATCAA GCCCTAGAAG CTGGGTTTCT TTAAATTAGG GCTGCCGTTT TCTGTTTCTC	120
CCTGGGCTGC GGAAAGCCAG AAGATTTTAT CTAGCTTATA CAAGGCTGCT GGTGTTCCCT	180
CTTTTTTTCC ACGAGGGTGT TTTTGCTGCT AATTGCATGA AATCCCAATG GTGTAGACCA	240
GTGGCGATGG ATCTAGGAGT TTACCAACTG AGACATTTT CAATTTCTTT CTTGTATCCTC	300
TTGCTGGGGA CTGAAAACGC TTCTGTGAGA CTTGATAATA GCTCCTCTGG TGCAAGTGTG	360
GTAGCTATTG ACAACATCAC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

GAATTCGGCC AAAGAGCCCT AGTAGGTTTA TAAACAGAAG TTAAACTTG TAAGCTTAAG	60
CTTCCGTTTA TAAACAGAAG TTTAAAATTA TAGGTCCTGT TTAACATTCA GCTCTGTTAA	120
CTCACTCATC TTTTGTGTT TTTACACTTT GTCAAGATT CTTTACATAT TCATCAATGT	180

CTGAAGAAGT TACTTATGCA GATCTTCAAT TCCAGAACTC CAGTGAGATG GAAAAAATCC	240
CAGAAATTGG CAAATTGGGG GAAAAAGCAC CTCCAGCTCC CTCTCATGTA TGGCGTCCAG	300
CAGCCTTGTT TCTGACTCTT CTGTGCCTTC TGTGCTCAT TGGATTGGGA GTCTTGCCAA	360
GCAATGTTCA TGTAACTTTG AAGATAGAAA TGAAAAAAT GAACAACTA CAAAACATCC	420
TCGAG	425

(2) INFORMATION FOR SEQ ID NO:1420:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

GAATTCGGCC AAAGAGGCCT AAGACGCATG CCTGTAATCC CAGCAACTCG GGAAGCTGAG	60
GCGGGAGAAT CGCTTGAACC CGGGAGCGGA GGTTCGGTG AGTTGAGATG GCGCCACTGC	120
ACTCCAGCCT TGGCAAAAAG AGCAAACTT CATCTCAAAA AAAAAAAG AATGTGTGGA	180
ATAATGGGGG TTTTTCCTT ACTTTGTGG CTTATTCTCA CTTACATGGG GATAGCCTTG	240
GTCTTTGACT TGGATAGCCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:1421:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 144 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GAATTCGGCC AAAGAGGCCT AAGTGAATCG ATGTTCTGGC TTGGCTGTCT TTGGTGTTTT	60
CATTCTTTCA TTTCTTTCTC CCTGTCCTCA TCTCTCTCTC CCCGTGCCCT GCTCCCTACA	120
CCTATCCCTC CCCCTACCCT CGAG	144

(2) INFORMATION FOR SEQ ID NO:1422:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTCGGCC AAAGAGGCCT AGAGAGAATA AAATACATAT AGTTGATTAA AGGAAGGAAG	60
TTTATTACTT AGGGAAAAGG AAGGTAAAAA AAGACCCTAA GCAATAAAGG CAATTCTTTT	120
TTAAGCAGAA TACTTTCATT TTATTTCATT TTTGTTTACC AGTGTTGTTA CGAAAACCTGC	180
TGCTGGGGCT ACTTCAGCTG AGATGATTG GCTCTTTTTT GTGGCTTTCT TCTGTCTCTG	240
TACATCAGCA CTGTGTTAT TACACCAGCT ACCAAGTCAT CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1423:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 157 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GCGATTGAAT TCTAGACCTG CCTCGAGACA GAGCAAGATT CCGTTCCCAA GAAAAAAAAA	60
TTGTTCAACA ATAAGGGCAA AGGGAGAGAA TCATAACATC TGATTAAACA GAAAAAGCAA	120
GATTTTAAAA ACTAACTATA TAAGGATGCA TCTCGAG	157

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 408 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGGCC AAAGAGGCCT ACTCAAAAGA CAAAAAGAT ACATTAGGCA GTGTTCTGTA	60
AACATGGGAA AATTATTTTA GGTAAATGG GCTGAGAAGA AATTGCTAA ATTTGCTTT	120
TGTTACCACG TTTCCTGAAA TGATGATAAT AAATAATATT TTAAAAGGGT GAATAGAAGG	180
ATCTTTATTG TAGGTACTGG TGTTAAATT TAGGTCAGA AATAATACTG TAAAGCTACT	240
TTCTTTACAC AGATTAACAC ATTTATCTTC TTGAATTATT TAATAATGAA TGCAAAAAA	300
TTCGAAATCT CATATAAGAT CTCACCTTGA AACAAAGTAT ATAAACTGTT GATTGCACAA	360
TTTGGGTTTT GTGAAGCAGT CAGTTTTGAC TATAAGTGGC AGCTCGAG	408

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 468 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGGCC AAAGAGGCCT ATTCTTGCTC CTAAGAATA ACTGTGCTTG AAGAAGAAAA	60
TTCCCAACAT GGACAAACCA CGCAAAGAAA ATGAAGAAGA GCCGCAGAGC GCGCCCAAGA	120
CCGATGAGGA GAGGCCTCCG GTGGAGCACT CTCCCGAAAA GCAGTCCCCC GAGGAGCAGT	180
CTTCGGAGGA GCAGTCCTCG GAGGGAGGAG TTCTTTCCTG AGGAGCTCTT GCCTGAGCTC	240
CTGCCTGAGA TGCTCCTCTC GGAGGAGCGC CCTCCGCAGG AGGGTCTTTC CAGGAAGGAC	300
CTGTTTGAGG GCGCCCTCC CATGGAGCAG CTCCTTGTG GAGTAGGAAA ACATAAGCTT	360
GAAGAAGGAA GCTTTAAAGA AAGGTTGGCT CGTCTCGCC CGCAATTTAG AGGGGACATA	420
CATGGCAGAA ATTTAAGCAA TGAGGAGATG ATACAGGCAA CTCTCGAG	468

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

TTTGACCAGA	TTATTCTTCT	ATGCTTTTTT	GCAATAAATC	AAATCCCACA	TATCTACAAG	60
TGGTATGAAG	TCCTGCACCC	CCCAGGAGGC	CTGTCCAGGC	ATGTCTTCAG	AGGCAGGGTG	120
GGTTACACTC	ATTACCTCC	CCTCTCCCCA	CCAAATTATG	ACACAAACGA	GTATGTTTCC	180
TCTCTAGAAC	CCTGTAATGC	CTCCTCCCCC	ATCCCCAGAG	CTCCTTACTG	TAGGTCTTAC	240
CCTGGACAAG	GATTTTTTCA	AGTTGGAGGC	ACAGAACATG	AGCAATCTGA	CATTCCCACA	300
GGCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1427:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGGCC	AAAGAGGCCT	AAGTGAGGAC	AGGGCAAAGA	TTTTATAGTC	TCCTGTAAAC	60
AGGAAGTGTC	CTAGTCTGAC	GTAAGTGCTA	CGTTGTACCT	GGATGGCCTC	TTTCTTGATC	120
TTCACGGGTA	CGTGCTTCC	AGCCAGGGTA	GGTGTCTTCC	GGCCGGCTTT	CTTCCTGCTT	180
CTGCTATTTT	GCTGGCCAC	ACTGCTGGCG	CAAGGCTTGC	GCCTTGGTAC	TGGGCCTGAG	240
AAGGGAGGAG	TTATTCATCC	CCTTAAGCTT	TCAGGCCCCA	GGGAGAATCT	TACACTACTG	300
GGCTGCATTT	CCAGACAATT	AGGGCATTCT	AAGGCACAGG	ATGAGGTAGG	AGGTCCGCAC	360
AAGATACAGG	TCATAAAGAC	CTTGACAGATA	AAACAGCTTG	CAGTAAATAA	GCTGGCCCAA	420
ACCCACGAAA	ATCAAGATTT	TGACCAGAGT	GACCCTCTGG	TCATCCTCAC	TGCTACACTC	480
CCACCAGCAT	CACGACTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 135 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGGCC	AAAGAGGCCT	AGACCTTGTT	TAGTGTGTGTA	AAGTTCTTCC	AGTCTCGGAA	60
TGGTAAGGAA	TTTATGCATG	CTTACTCCAT	TTTCAATAAG	AAGTTTACAA	AATGCAACTC	120
TATCCATTAC	TCGAG					135

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 245 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGGCC	AAAGAGGCCT	AGGGGCAGCG	AATGTTTTTA	GAAGCAGAAA	ACTTTCCTAA	60
TTTGGTGAAA	GACATAAATT	TACAGATTTT	AAGAAGCTCC	ACAAATTCCA	AATATGATAA	120
ATATGAAGAA	ACTCATAGCA	AGGATGCTAT	ACCACACACT	TCTGAAATAA	CCACAGGTCA	180
AAGAAGTCAG	ACTCTCCGGT	CTGACATGTA	AAGGGCCTGG	AAGTCGTCAC	TCCCATCCTC	240
TCGAG						245

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCGGCC	ANNAGAGGCC	TAAGAACTG	GAAGTGCCTT	TCATCTCCTC	CCCCACCTAA	60
CTCCCCAGAA	TAAATCACAA	ATACTTTTGT	GTGTATATTG	TTCTGGAAAT	TGTAAATGTT	120
TAAACAAATC	TACTAAGGTA	TACTCTTCTG	AAATTTTCCT	TTGAAAATTT	AGTTTATAAT	180
TTGGAATTTAT	TTCTTGATGA	GCACATGCTA	AACTCATGCC	ACCCTTTTTT	GATGAAAATT	240
ATTACATGTT	TATTAATATA	TCACATTCCC	TCCCTCCCTG	TCCCTTTTTT	CCCCCATAAA	300
ACACAATACT	GTCAACTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCGGCC	AAAGAGGCCT	AGTGTGAGAC	ATTTGTCATT	GCTCAGAATT	TTAAAATTGC	60
ATTCCAAGCT	GTTGGATTG	AGTTTAAGTG	AGGCCAAACT	GGGGCGAGAT	CAAACACACC	120
ATCAAAGAAT	TACACACATA	TCCTTGTTGG	CACATCGCTT	TTGTTGTTTG	TTTCAAGGAT	180
GCTGTGTGTG	TTACTAGGGT	TAAGACTCTT	CTCCTTGGCT	GAGGGATCTC	CTCTGGAGAT	240
TTTGAAAACA	GGAAACAGAT	TTCTCTCTCC	CTTCTCTGGT	AGTCTTCCTA	TTCGTGTTAG	300
AAACAATCAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC	AAAGAGGCCT	ATAAAAATGC	AAAAAATCCA	GTCTAAATAT	TGTCTATAGT	60
TTTTTAGGAT	TATAGTGTA	TCTGCTCTTT	TAACTTATGT	ATCTCTACAG	CCTGCCACCA	120
TATAAGCTTT	TAATTATAAA	ATTATGATGC	TTGACATTGG	GGAGAAAGGA	ACATAAGCAC	180
CCATAATGAG	TCATTTTGT	TGACTGTATA	AATGAGTCAG	AGTTACATGT	AAGGATGAGA	240
ATATCCTCCT	ACAATTTTGG	TTTTTGATCT	TGATTTTTTC	CCATTGACTC	TCTTTTCTCC	300
CCGCCATTCT	CTCTCTTGCA	CGTAGCACAC	TTTTGCGCTC	TGTCTGCTAT	TACTGCTATT	360
ATAAACCTTT	TACTGGACTT	CAGTTGTAGT	GACCATTAGG	TCCTAAACAT	AGAACTAAGA	420
GCGTAAGTGG	ACTTTAATAG	AATACTTATT	AATTTTAATA	ACTAGAGTTC	ATAATTTAGA	480
ATTAATATAT	GAGAATTAC	TGTATAATCC	TCGAG			515

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTTT	TTTCTCTTTT	TTCTTTTCC	CTTTTGACTT	60
TTGAGGCTCC	TGTTCTTTGG	CAGCACCAGC	TCCTTCTATT	TCTGCAGCCA	AGGCATCAAG	120
ATCAAAGTCA	TCCTTGGTGC	TGTCTTCGCT	CTTGTTTTTC	TGTTTCTTCC	CCATTGCTTG	180
TCAATGGCGC	TCGTGGCCCC	AGCCCCCTCTA	TTGGGTCTCT	CACAGACCCA	CTGTCTCCCG	240
GCTGACTTTG	GTCTCCGCTC	AGCTCTTTTC	CCCTCGTGCT	GCCGCCGCTC	GCACCCGGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAATTCGGCC	AAAGAGGCCT	AGAATTTATG	TAATCCCAGG	GTGGCTACCT	ATTTCACTAG	60
TATTCCTCCT	GGCTCAGTTT	TAAATTTATT	TTAGAAGCTT	GGATTTCTCC	CTAAGAGTTC	120
AAATTTTCCC	AATTATATTT	GGCTTCCAGT	TGACTTTGAT	ACTGGAATTC	TCTGCCAGGA	180
AGGAGTGAGG	CCATCATGTT	TCCAATTATG	CCATCAGTGG	CATCTCTGAT	ATTTTGCCAC	240
GTGTTGCCCC	TGTACAGCCC	TGAGGTGTTG	GGCAGAGGAG	GCCAACCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

```

GAATTCGGCC AAAGAGGCCT AAGACCCCCC TCAGCCTCCC GGAGTGCTGG GATTACAGGT      60
GTGAGCCAAT GCATCCAGCT GACTTTTGGG CTCTATCTTG AGGTAGCTGG GAGCCACTGA      120
CATATGTCAA GCAAGGGATT GACATGATCA GATTATTATG TAGAAAGGCC AGTCGCTCTG      180
TCTACAGTGT GGAGAGTGGA TTGGGAGGCA GAATGACCAG TCTGGAGGCT ATTATAGTAA      240
TCCAGGTTAC AGATGGGGGT AATGAGACCT AGGCAGGTAA TAGCGTGGCT AGAAGGAATG      300
GATAGATTCC AGAGACATTT GGAGGTGAAA TCAGGGGCTG GCGATTTAAC TGGGTATGAA      360
TAAAGAGGTA GAAAGAAGAT TTGAGGATGA TGCTCAGCAT TGAACAAGAG GGTAGACTCG      420
AG

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(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

```

GAATTCGGCC AAAGAGGCCT AAGCTAGTTA TATGTTATTC TGGGAAAAAA TATTATTTGT      60
AGTTATTGCT ATCATGAAAA ATAAAATTTT ATGTGTCCTA AATTTAATTA TATTTTATGA      120
AACATTAACC CTGACACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

```

GAATTCGGCC AAAGAGGCCT ACGTACATTT ACTCTTTATA CATGTTTTTT TTGTATGTCA      60
TACCTTTACA GTCATTATTC TTCTTGATGT TCATATCTCC CCATCTTTGG CCAGTTAGAG      120
CATTTCCAAG TGAGCTCCTG TGTCTTTTG ACAAGACCCC AGTAATCGTT CTGCTTTTAG      180
ATAGAATAAG ATGTTTGAGG ATTCTTTTAT ACAACTTTAC CCTAGACCTG AACTCAGACA      240
TCTCTCCAAG GAGCGAACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

```

GAATTCGGCC AAAGAGGCCT AGCAGCCTCT GCCTCCCGGG TTCAAGTGAT TCTCCTGCCG      60

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CAGCCTCCTG AGGATCTGGG ATTACAGAGG CTATTTGGAA GCTCCAGACT GTTTAGAAGA      120
CCTGGACAGC CAGAAAGTCA TTAGTCCTAT CCAAAATGAA GCAATTTGTG CAGGAAAAAC      180
AGATATTTTA TGGAAGAACT GTGAGTTTCT GGTAATCGA ATGTGCCGTC TTGAAAGCCT      240
CATGCAGTCC TTGAAGATGA ACATCTTTCG GCTGCAAAC T GAAAAGGATT TGAATCCTCA      300
GAAAACAGCT TTTCTGAAAG ATCGACTGAA TGCAATACAG GAAGAGCATT CTAAGGACCT      360
GAAGCTGTTG CATCTCGAAG TTATGAATTT GCGCCAGCAA CTGAGAGCTG TAAAAGAGGA      420
AGAAGACAAG GCACAAGATG AGGTGCAAAG GTTGACTGCC CCCTCGA      467

```

(2) INFORMATION FOR SEQ ID NO:1439:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

```

GAATTCGGCC AAAGAGGCCT AGGCAGATCT GGCAACTTTC ATATCTGATA TTATGTTACT      60
GAAACTAATT TTAGGTCGCT TTGCATCTCT CTGTGCCCTC GAG      103

```

(2) INFORMATION FOR SEQ ID NO:1440:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 465 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

```

GAATTCGGCC AAAGAGGCCT ACATNTTTGA ATCTTAAACT GNNTTTTTCT CTTAGTATTG      60
CTAATGAGTA AAGAAAAGTC TCATAAGGTA GCCAAATGAA AAAGAATGAA AGGGAAAGTG      120
AAAAATTAAG GGGACNAAAG ATGGGATGTG AAAAGAAGAA TTCTAGTTTG ATGGTGACTC      180
ATATTCACGA TAGGATACAA AGTGTGATTT GTTGGAAACA TGTCCCAAT TTCTAAAT      240
CTGCTTCTCT GCCAAAGCA ATGTCTTCT TGGTTGATAT TTGAGTTTA AAAGGGTCAA      300
ATCTTTCTAA TTTTTGTAT CTNNAGAGGG CAGCACTAGA AGAAATCAGC AGGTCTAATC      360
CCACCACTAA GAAACTACC ACTTCTTGAT TTTTACAGAT TTAATAAAT CTTTTCAGTG      420
ACCTTTCTTT TTAATGTAAA TACAAATTTA AACCTTAGGC TCGAG      465

```

(2) INFORMATION FOR SEQ ID NO:1441:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 336 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

```

GAATTCGGCC AAGAGGCCT AGAATTATAC AGGTAGAGAT GTATGCAGAT GTGTCCATAT      60
ATGTCCATAT TTACATTTTG ATAGCCATTG ATGTATGCAT CTCTGGCTG TACTATAAGA      120
ACACATTAAT TCAATGGAAA TACACTTTGC TAATATTTTA ATGGTATAGA TCTGCTAATG      180

```


AATTCTCTTA AAAACATACT GTATTCTGTT GCTGTGTGTT TCATTTTAAA TTGAGCATT	240
AGGGAATGCA GCATTTAAAT CAGAACTCTG CCAATGCTTT TATCTAGAGG CGTGTGCGCA	300
TTTTTGTCTT ATATGAAATT TCTAATCCCT CTCGAG	336

(2) INFORMATION FOR SEQ ID NO:1442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 119 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCGGCC AAAGAGGCCT ATGATTTTGA GACATCCAGA AAGCAAACCT TAAGTGTCTG	60
TGAGGTACAG AGACTGGATG ATGTTAAAGA AAACCATAGT TGGACACAAG ATACTCGAG	119

(2) INFORMATION FOR SEQ ID NO:1443:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 214 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCGGCC AAAGAGGCCT AGAGAAATTT TAAAAAGCAT AGTTGAGGCA TATTTTTTCA	60
TAATTATATA CTTATCTGTT TATTGCCCAT GGAAATATA TGTGTAGAAG TATTTCTTCT	120
GTTATTTGTT ACTATCTTCT TAATTTGTTT CAAAGAAAAT GCTGCCATAC TGCATTCCCT	180
CTGGAAGGAA ACAAACAAA ACAAACCTCT CGAG	214

(2) INFORMATION FOR SEQ ID NO:1444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 499 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GAATTCGGCC AAAGAGGCCT AGGAAAGGAA AAATTAAAAA CCCTAGATCT CTGGTACACA	60
TAAGTCTGGG TTGCGATTG CTATTGTGTC TGGGGCAGTG TGATTGAGAC TGACATTGAG	120
GAAAGAAGCA GCTATGAAGA CCAGGGGGTT CAGCTTTCCA AGACAAAGGC AAGTCCTGTT	180
TCTTTTCTT TTCTGGGGAG TGTCTTGGC AGGTTCTGGG TTGGACGTT ATTCGGTGAC	240
TGAGGAAACA GAGAAAGGAT CCTTTGTGTT CAATCTGGCA AAGGATCTGG GACTAGCAGA	300
GGGGGAGCTG GCTGCAAGGG GAACCAGGGT GGTTTCCGAT GATAACAAAC AATACCTGCT	360
CCTGGATTCA CATACCGGGA ATTTGCTCAC AAATGAGAAA CTGGACCGAG AGAAGCTGTG	420
TGGCCCTAAA GAGCCCTGTA TGCTGTATTT CCAAATTTTA ATGGATGATC CCTTCAGAT	480
TTACAGGGCC GAGCTCGAG	499

(2) INFORMATION FOR SEQ ID NO:1445:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```
GAATTCGGCC AAAGAGGCCT AAAATTTGAT TAGAAATGCA AGACTGGATG CCAAGATTGA      60
TTCTAAATTA GGTCATGTGG TTATGGGTAA CAATGCAGTC TCACCCTATC AGCAAGTGAT      120
TGAAAAGACC AAAAGCCTTT CCTTTAGAAG CCAGATGTTG GCCATGAATA TTGAGAAGAA      180
ACTTAATCAG AATAGCAGGT CAGAGGCTCC TAACTGGGCA ACTCAAGATT CTGGCTTCTA      240
CTGAAGAACC ATAAAGAAAA GATGAAAAAA AAAACTATCA AAGAAAGATG AAATAATAAA      300
ACTATTATAT AAAGGGTGAC TTACTCGAG                                     329
```

(2) INFORMATION FOR SEQ ID NO:1446:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 607 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```
GAATTCGGCC AAAGAGGCCT AACAGAGGAA ACCACCCTTC AACTGGAAGA TATCATTAAA      60
CAGAGGATAA GAGATCAGGC TTGGGATGAT GTAGTACGTA AAGAAAAACC TAAAGAGGAT      120
GCATATGAAT ATAAAAAGCG TTTAACCTTA GACCATGAGA AGAGTAAATT GAGCCTTGCT      180
GAAATTTATG AACAGGAGTA CATCAAATC AACCAGCAAA AAACAGCAGA AGAAGAAAAT      240
CCAGAACATG TAGAAATTCA GAAGATGATG GATTCCCTCT TCTTAAAATT GGATGCCNTC      300
TCAAACCTCC ACTTTATCCC TAAACCGCCT GTACCAGAGA TTAAAGTTGT GTCAAATCTG      360
CCAGCCATAA CCATGGAGGA AGTAGCCCA GTGAGTGTTA GTGATGCAGC TCTCCTGGCC      420
CCAGAGGAGA TCAAGGAGAA AAATAAAGCT GGACATATAA AAACAGCTGC TGAAAAAACA      480
GCTACAGAAC AACTCGAGGT GTGGGGAAAA GAAAGAGAGA TCAGATTGTT ACTGTGTCTG      540
TATAGAAAGA AGTAGACATA GGAGACTCCA TTTTGTCTG TACTAAGAAA AATTCTTCTG      600
CCTCGAG                                     607
```

(2) INFORMATION FOR SEQ ID NO:1447:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 467 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```
CTGCTGCAGC AATATTCAGA TTGAAAAAAA TAGGTTTGGG TTCACTGAGT TTAAAGGGAT      60
GATGATAAAA AGGAGGTTCT TCTTCCTCTT CATCCGAAAC ATGAGGTTTA TTCACTATTA      120
CATCATCATC TTCTTTACTC TGTGCGATCT GTTACATTT CTCAGTTAGT TCTTCTATAG      180
TAGCTCCTCC TGACTTTTGA GCAACTTTCT CTTCTATAGT AGGTGGAGGT GCAGGCTTTA      240
GGTTTGGTGG TAAAGGGACA CCAGCCTTAG CACACATGGC AGCTGCATTA GCTTTGGCTA      300
TTTCAAGTAA TTGAGCCTTA TCCAAATCTG TCAGACGTTT GGGTGATCTG CCTCGTTCAG      360
```

AAGACCTGGA TCTTTTACGA CGGATGGGAG ATCTGCTAAA CCTTCTTCTT AAGGGTGTTC 420
 TTGATCGCCT TAATCTGACT GGTGAGTAGG CCTCTTTAGC CGAATTC 467

(2) INFORMATION FOR SEQ ID NO:1448:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

GAATTCGGCC AAAGAGGCCT AGACACTTAT AGGCTTTTTTA AGAAGCATTG ATCAATTTGC 60
 AAACCTTAGTG CTACATCAGA CTGTGGAGCG TATTCATGTG GGCAAAAAAT ACGGTGATAT 120
 TCCTCGAG 128

(2) INFORMATION FOR SEQ ID NO:1449:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

GAATTCGGCC ACNGAGGCCT ATTTAAATGA AAATNATTTG AATGTTTAAT ACTCTTCCCT 60
 TCTTCAATTG TAGAAACATT ACCCTTTTGC ACTATCTCAT CACTATTGTG GAAAATAAGT 120
 ACCCCAGTGT TCTCAATCTA AATGAAGAAT TGCGAGATAT TCCTCAAGCT GCGAAAGTAA 180
 ACATGACTGA GCTGGACAAA GAAATAAGTA CCTTGAGAAG TGGCTTGAAA GCAGTAGAGA 240
 CAGAGCTGGA ATATCAGAAG TCTCAGCCCC CACAGCCCGG AGATAAGTTT GTGTCTGTTG 300
 TCAGCCATCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1450:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 432 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

GGAATTCGGC CAAAGAGGCC TAGTGGTTTT CCCAGGAGGA AAGAGAGCTG CAGGGATACA 60
 GATGCCCTTC TGAGCAGAGA AAATAGAATA CTTGAGCCAA TTTTCATGTA AAATGGATTA 120
 TTTTCCTGGC GTTTCCTGTC CTTCAAGTAA AAGGTTCTGG AATGAGTACT TCACTGCTGT 180
 AATGGAGACA CTAATATTTT ATGAATGCAG TTTTACAGTT TGCAGTAATG CCAGGCCTTT 240
 GGCTGTTTTT CATTAGATGG TGCACTTGGC TGGAAGCATA TACTCTTGTA GCTTTGATTT 300
 TAAATTTAAC TTTCAAGTTG AAAGAGCAGT GACTCATCCA AAGGACAGGT GATATTTATT 360
 TATTTTTTCT TGAAAATGCA GCACGGGTAT GTTGTTATCA CACGTTTAGG GGAATTGCCA 420
 CACTTCCTCG AG 432

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GAATTCGGCC	AAAGAGGCCT	AGGATTGAAC	GCTTTCACCC	TGTGCCCCGC	GCCTGGCGTA	60
ACGCGTGGCC	CCAGACCACA	CGCTGTAACC	CGGGGTGAGA	GGGAGTGAGG	TGGGACTTCG	120
TACCGGACCC	GGAGCGCCGG	CCTCGCCCCG	GCGGGCAGCG	TTCACTGTGG	GGAGTGCTCA	180
CTCAGCCTAG	GGCGGCCCGG	GAGGACTGCC	GGGAGGAGGG	AGTCGGCCTT	GAATTGAGGC	240
CTCAGCCTTG	AATAGGGTAG	GGAGGCAAGC	CTAGCCGAGA	GTTTAGCACT	AGCAAAAGCC	300
TGGAGGCACC	AGGGTCTGCC	CTAAGAACTG	CAGCGCCTCT	GCTCTGGCTG	GGATTTAACG	360
CATTACGTCT	CTGCTGTTTA	TAGGTGTTGT	GTTTGGTCTT	ACGACTTCGT	ATTCTATAGT	420
TTTTATTAT	TCCTGTTTTT	TGAATTTTCC	CACTTTGCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GAATTCGGCC	AAAGAGGCCT	AATGCAAGTC	TGGACCGTTT	AAAAGCTGGT	AATTAAACAC	60
TTTATTCCAT	ATCAGAATAA	AAGTCAACTA	GTTGAATATT	TCTAGGTGAG	ATGTGGTACT	120
ACTTTTTTTT	TNGCTGTTAT	TTTATGTCTG	TATCTAAAT	ATCTTACTGC	ACTCTTTTTT	180
CAGGTTGCAG	CAGATCCTTG	AGTTTTGAAC	CTGACGGGCA	AATCAGAGCT	TCTTCCTCAT	240
GGCAGTCGGT	CAATGAGAGT	GGAGACCAAG	TTCACTGGTC	TCCTGGCCAA	GCCCCACTTC	300
AGGACCAAGG	CCCATCATGG	GCTTCGGGCG	ACAGTAGCAA	CAACCACAAA	CCACGAGAGT	360
GGCTGGAGAT	CGATTGCGG	GAGAAAAAGA	AAATAACAGG	ACTCGAG		407

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GAATTCGGCC	AAAGAGGCCT	ACGGCCAAAG	AGGCCTATAG	GCCTCTTTGG	CCGGAATCA	60
TGGTGTTATA	GATCAAAAGA	TAAAAGTTTC	ACAGAAGAGG	TGGGATTGTA	ACTAAGCTGT	120
TCATGCTCAG	TAAGATTAGA	GGAGGTGAAG	CAAATGGGGG	AATGTGTGCC	AGAAGAGGAC	180
AGGTGCAAAG	ATAAGCACTG	GTGCTTGATC	TTGACTGAAT	TTTCAACCAA	ACCAGCTGAC	240
TCTCAGGATA	GTTGAAGGTC	ACTTTCTGCT	GTTTAAAGAA	AGATTCTAAA	GTTACTTAAG	300
AAATATTTGG	CAAAAGACTC	AAAAGGAAGG	ATTCCAATTA	CAATATAAAT	AAAGTAAGAA	360

ACCTCGAG

368

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 618 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

```

GAATTCGGCC TTCATGGCCT ACCGTGCTCT ATGCTGATCC TTTTCTCGT GAGAAAACGC      60
TGGCCTGTTA TTATTAGCTA AGGTCACACC CGCTGGGCAG CTCCTGGGAT TTTTGGATTC      120
CTCCCCACTC CAGAGGGAAG GCTATTTCTA GTGGCTTCTT TTCTTTGAGT CCTCCCTTCT      180
GTCTGTCTCT CTCCTGTTCC TCCTCTTAC CAGTAGGGCT TCCTCAATGC TGACAGCCCT      240
GTGAAAAAAG GGGAGACATG CCGAGCTCCG GCAGGAAACT GCTGGCCCAG GACCTGGCTT      300
CTGGGGCACA AAGGAGAATT TCTGTGTTG GAAAAGTACA GACTGAGCAG GTGACCCCG      360
CACAGCCCCCT TGGGGGAAAC ACTTGTGCC TTTGAGTCTG ACTGATATAA ACACAGACTC      420
TCTTGACTGT CCCATAAAGG CCAAAGCCAG AGAACCTCAG AAAGGGACTT GCAAATTGTG      480
AGTGAGGCAT ATCAGCTGGT GCTTTCTTTT CTCTGTGGGC TGCCATTTAT GAATCTCTTG      540
GTTTCTCTCT GTCTCTGTCC CTCACTTT CTCTCCTTTG CTGGTGTGTG CATTCCCTCT      600
GACGCGCTGG CTCTCGAG                                     618

```

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

```

GAATTCGGCC TTCATGGCCT AGCCTTTTTT AAACTCAGGA AAGACAAAGG TTCAATTACA      60
CCACTTTTGT CAATAAGCAA ACCAGGTATT TTTTCTTCTT CCTGTTGTCT GGATATGGCA      120
ATAAATTTTT TAAATTGCTG TGAGAACCCA TATATGAAAA GAGAGGAGTT GAATTGTGTG      180
TGCCTTTTAT GTCTTGAGAT TTATATGTGG AAAAGACGAC ATCTACTTCA AACTGTATTT      240
TTTTCGTTTT TTTTTTTTTT TGGGGAAGGG GGGAGAACGG GGTCTTGCTC TGTCGCCAG      300
GCTGAACCTG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGCCT TCATGGCCTA GCTTAATCTT ACAGTCATTT AAAATAATTT CAGAAATGTT      60
CCTTTCATAC CATTGTCTCC ACCCCCAAAC CAGCTTACTA AAAATGGCTT AGGATTGTGTT      120

```

```

TTCAGTCCTT CCTCTTCCTC TCCCCTGCTC CCAGACAAGG GTGTGTACTC AATACTGTAT      180
TCAGAAGTTA CTTGGGTTAG TTCTTTTTTT CCGATCTTTC AGTGTGATTA TTTTATTCAT      240
TTGAAATACA ATTGGATTCA TTCGTTTCCG TATGCTTTCA GTTTTAGCTT TTTTCCACTA      300
TCTTTGTTGA TATAATTGCA TTTTGTGATA GGGGGATATT AATATACTTC ACAAAGTCAG      360
AATAACATAA GGGTTTACTC AGATGTAACC TGTATCTTA GCCCGTGATC TCGAG          415

```

(2) INFORMATION FOR SEQ ID NO:1457:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC TTCATGGCCT ACATTTTCT ATTGATATAA AAATTGTTAG AGAAATATAC      60
AGTTGTATAT TTCCCCCTT TATACAGAAA TTTTACAATA ATTCAGATT TTTCTGAGTT      120
TTTTCAGATT TTTGATTCTA TAATATGAGA TTATTCTTTC TTCCTCTTAT TTTTGTAGGT      180
TATTTATTTT TTCTTTTCTT TTTAATTGTC TCATACAGGT TACTCTCGA G          231

```

(2) INFORMATION FOR SEQ ID NO:1458:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 155 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCTGTT CATATTTTTA AATGTTCTT TTTTCAACA TTCAGCAAAA TATTATGTGC      60
TAGGAAGTCT CCCAGACGCT TGTTAACATC TATGAATACA ACAAAGATTC TGCCCTCTG      120
GGCCTCTTTT CTGATGGGGA AGCAAAATC TCGAG          155

```

(2) INFORMATION FOR SEQ ID NO:1459:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 312 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC TTCATGGCCT AGGTGACTAA GTACAAAAAA ATAGTTTCT CATTGTATTC      60
AAAATAGTGA GTAGGTTCCC TGGATAATAC ACAGTGGTAG TTGACATATT TTCTCAAAAC      120
ACAACCAGAA AACCCACTTC CGGTATTTGT AAATCACCTT TCAAGGAAA AAGTGAACAC      180
GTATTCCTTG TATTTCTAGT TTGATTACCA AACCTGATGT TACAAAGAAA CCTCCGTTCT      240
GTAGACAGAA TTTCTTTTAT TTTTCTTCTT TACTCCTCA CAATCACTTT CCCAGTGCCA      300
CCACCGCTCG AG          312

```

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

```

GAATTCGGCC TTCATGGCCT AGTCTCCCTC GGCCTGTGCC GCCGCCGACG CCGCTTGTGG      60
GCCCCACTCC GCTCTGTCTG CTTCGCCACC TTCTCCCCGA GCACTGCCCC GCCGGCCGCC      120
ATGGCTAACG TGGCTGACAC GAAGCTGTAC GACATCCTGG CGTCCCGCCC GCGCCAGCG      180
AGAACGAGCT GAAGAAGGCA TACAGAAAGT TAGCCAAGGA ATATCATCCT GATAAGAATC      240
CAAATGCAGG AGACAAATTT AAAGAAATAA GTTTTGCCATA TGAAGTACTA TCAAATCCTG      300
AGAAGCGTGA GTTATATGAC AGATACGGAG AGCAAGGTCT TCGGGAAGGC AGCGGCGGAG      360
GTGGTGGCAT GGATGATATT TTCTCTCACA TTTTGTGGTG GGGATTGTTC GGCTTCATGG      420
GCAATCAGAG TAGAAGTCGA AATGGCAGAA GAACTCGAG      459

```

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

```

GAATTCGGCC TTCATGGCCT ACGAGATCAA GGACAAGAGG CAGCTTATAG ACAACCGCAA      60
GCTCATTGAG ACGCAAATGG AACGGTTCAA AGTTGTGGAA CGAGAGACCA AAACCAAAGC      120
TTACAGCAAA GAGGGCCTGG GCCTGGCCCA GAAGGTAGAT CCTGCCCAGA AGGAGAAGGA      180
AGAGGTTGGC CAGTGGCTCA CGAATACCAT CGACACGCTC AACATGCAGG TGGACCAGTT      240
TGAGAGTGAA GTGGAGTCAC TGTCAGTGCA GACACGCAAG AAGAAGGGCG ACAAGGATAA      300
GCAGGACCGG ATTGAGGGCT TGAAGCGGCA CATCGAGAAG CACCGCTACC ACGTGCGCAT      360
GCTAGAGACC ATCCTGCGCA TGCTGACAA TGACTCCATC CTCGTTGACG CCATCCGCAA      420
GATCAAGGAC GACGTTGAGT ACTATGTTGA CTCATCCCAG GACCCCGACT TCGAGGAGAA      480
CGAGTTTCTC TACGATGACC TGGACCTCGA G      511

```

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

```

GAATTCGGCC AAAGAGGCCT ATTTGTTTTG TGGTTTTAAA ATTTTCTT CGCATAAAGG      60
GTAACATCTT GCAACTTGAT TCTTTCACCT CATGATATGC CTTAGATTTC TTTCTTCCC      120
AATACTCGAG      130

```

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTCGGCC	AAAGAGGCCT	ACTTGTNAAG	TGCTTTTGAA	TTAATAAAAT	ATTAGCATAA	60
TTGTGTNTAG	TCAGTTGAAC	CCACTGTTAC	CATTGTTCTT	ATCCCATGGG	AAGCAGTTGG	120
TTACACGATT	CTTATTTTAT	AAGAAACAGC	TGAGAGGCAC	TATGGATTAG	TCTTCTGAAG	180
TGAAGGAAAT	ATAGATGTCT	CCTAAGTGAT	AGTTAACCCA	TTTTTTTTTT	TTTTAGGCAT	240
AGAAGCCAGT	TCAGGGTCCA	TAATATTTAG	TGACCAACAT	TTTAAAGTAT	AGCAGCAACC	300
TGGTTCTTAA	ACACAAAGTA	AGTTGCCCAT	TAACAAATGG	CTTTTATCTT	TAGCATGAAA	360
ACTTTCACCA	CGTCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC	AAAGAGGCCT	ANAANAACT	TTTTCTTGGG	AGCAAGGTAG	TTATTTCAAA	60
GCACAGAAAA	AGGCGGCGGG	GGGCACAGAG	AAGCACAGAG	AAGCGGGGGC	AGTTGCACAG	120
GTAAAACATT	CATCTTGGCT	TTTCTTTTAA	AAAGATAAAC	TTTGTCCAC	GTAAAGAGGA	180
ANACTGCATA	GATATTCATT	GAGATTATCT	GATTGTTCAC	TGTTGCCAAA	GAAAAAACAA	240
AGGTAAAATA	CACGAGTTTC	NNCATTGAGA	AGAAAGTATT	TCAGGTAAAA	ATTAAGTATT	300
AAGCAACTTT	TCTCAGCAGA	AGAAATGCCC	AAATTCTTAA	GGACAGTACT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC	AAAGAGGCCT	ACACTGCTCC	AGCTCTGACT	CCCTCATCCC	TTGCCTGGAC	60
CATGGTAATT	GACCCTAGCT	GGTCTCCTTT	TCTCCTCTCA	TCAGTCCTCC	ACATTGCTGC	120
TGTTTTTCATC	TTTGTGACAT	ACAAATGTGT	TGCTTTCCCG	TCTAAAACCC	TGCTTGCTCC	180
TCCCCATTTT	GACTGCCTGC	CCCCAGCAGC	CACACACACA	ACACTCGAG		229

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 327 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTAATTTAT	60
AAGGAATAGA AATTTATTGG CTCACAGTTC TGGGGGCTGG GAAGTCCCAG AGTAAGGTGC	120
CAGCGTCTGG TGCAATCCTT CTTGTTGTGT CACTGTGGAA GGTGGAAGGG CAAGAGAGGG	180
CCAAGCTCAT CTTATTATAC CAGCACCCAT TCCAACATCA TCCTCGAAGG ATCCCAATT	240
TGAAAGAAAA AGCATGTGAG ACACAGAACA GGCGAGAGAG TGAGGGCCCG GCATGCCCCC	300
AAGTCCCCAC CACCGCACCT GCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 403 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCGGCC TTCATGGCCT AGAGAGAGAG AGAGAAAAGG AGGGGGTGGT GGAGAAGCGG	60
GAGCGAAGGA AAGGAGGCAA AAGGCAAAGT GAAGGAAAGC TGGATAGCTC GGCCTCTCCA	120
AACTGATTGA TTAGTCATGA TCCCCGAGT TTTAACAGGG ACTCATTCAA TTGGGAAGGT	180
GGAGCGCTGG GGAGCAGATT AGCATACGCT TGTTTACTCA TCTTCTGAGG GATTTTTTCC	240
CCCTCTTTCC TTTTATTTG AGAAGAAGGA GGGAGGGGAG GGGGGACTTG GGGGGGAGA	300
AGGGGGCTGT GGCTTGTGT ATAAAGGACG CAAAAATAA ATAAATTAGA GCATCTTTTG	360
GGGGGAGGGA ATTCAGCGGA TCAGTCTTAA GATGGAGCTC GAG	403

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 329 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC TTCATGGCCT ACACGAGGTC AGACGTCACA CATTGTTTTT TGGCTTGTTT	60
TTTTGAAGTT TTTACGACTT GTCATGAGTC TCGGCCTGGC TTCTGTTTTT CACTGTCCGG	120
AAGAGTGTGG TCCTTCTGCA TTGACCTTC CTTACCCTC ATCCAGTCTC CCCAGTGTGG	180
CCGGTCTCAT TTCGTGTCGT CAGCTGGGTC AGCTGGCTCG GTGTGGAGTT TGGATTTTCC	240
GTGATCCATC CCATGCTTTT TTTTCTTTT TTTCTTTTTT CCTTTTCTT TCTTTTCTT	300
TTTTTTCAGT TTTCTCCCCA ACTCTCGAG	329

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 352 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCGGCC	TTCATGGCCT	ACAGGAAAAT	TCTTCTGGCG	TATTTTCATTC	TGATGTTTAT	60
AGTATATGCC	TTTGAAGTGG	CATCTTGAT	CACAGCAGCA	ACACAACGAG	ACTTTATGCT	120
AGAGAGGTAC	CAAAACAACA	GCCCTCCAAA	CGATGATGAC	CAGTGGAAAA	ACAATGGAGT	180
CACCAAAACC	TGGGACAGGC	TCATGCTCCA	GGACAATTGC	TGTGGCGTAA	ATGGTCCATC	240
AGACTGGCAA	AAATACACAT	CTGCCTTCCG	GACTGAGAAT	AATGATGCTG	ACTATCCCTG	300
GCCTCGTCAA	TGCTGTGTTA	TGAACAATCT	TAAAGAATCT	CTCACCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 609 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAATTCGGCC	TTCATGGCCT	AGAGCCGTCC	TATCAGATTA	TCTTAACAAG	AAAACCAACT	60
GGAAAAAATA	ATGAAATTCC	TTATCTTCGC	ATTTTTCGGT	GGTGTTCAAC	TTTTATCCCT	120
GTGCTCTGGG	AAAGCTATAT	GCAAGAATGG	CATCTCTAAG	AGGACTTTTG	AAGAAATAAA	180
AGAAGAAATA	GCCAGCTGTG	GAGATGTTGC	TAAAGCAATC	ATCAACCTAG	CTGTTTATGG	240
TAAAGCCCAG	AACAGATCCT	ATGAGCGATT	GGCACTTCTG	GTTGATACTG	TTGGACCCAG	300
ACTGAGTGGC	TCCAAGAACT	AGAAAAAGCC	ATCCAAATTA	TGTACCAAAA	CCTGCAGCAA	360
GATGGGCTGG	AGAAAGTTCA	CCTGGAGCCA	GTGAGAATAC	CCCACTGGGA	GAGGGGAGAA	420
GAATCAGCTG	TGATGCTGGA	GCCAAGAATT	CATAAGATAG	CCATCCTGGG	TCTTGGCAGC	480
AGCATTGGGA	CTCCTCCAGA	AGGCATTACA	GCAGAAGTTC	TGGTGGTGAC	CTCTTTCGAT	540
GAAGTGCAGA	GAAGGGCCTC	AGAAGCAAGA	GGGAAGATTG	TTGTTTATAA	CCAACCTTAC	600
AACCTCGAG						609

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGAGCCTGG	GCAATAGAAT	60
GAGGCTCCAT	CTCATAATAA	TAATAAGCAG	CAGCGGCAGC	TCTGGTAGAT	TTTTTTGTGT	120
GCTTGCTCTC	ATGAAGACTT	AAGCCTGCTC	TTTCAATTTG	AAACCTAGGC	ACTTGGACTA	180
ACTTAAAGA	TCATGTAAAA	AATTTAATTT	TTGTTTGGTA	TAGATTTAAT	TGTGGTTTTT	240
TTTTTCTCTT	TTAGATATAA	TTGATCCTGT	TGCTTTAGAA	ATTCCATTAT	CCAAAAACCT	300
TCTGGCACAG	ATTAGTGCTC	TTGCTCTTCA	GCTGGATTCA	GAAGATCTTC	ATAATTATTC	360
AGGAAGCCAA	CTATTTGAAA	TGCACGAGAA	AACCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:1472:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 306 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

```
GAATTCGGCC TTCATGGCCT ACAGGTTTAA AACTGGTTTT TTGCATACTG CTATATAATT    60
CTCTGTCTCT CTCTGTTTAT CTCTCCCCTC CCTCCCCTCC CCTTCTTCTC CATCTCCATT    120
CTTTTGAATT TCCTCATCCC TCCATCTCAA TCCCGTATCT ACGCACCCCC CCCCCAGGC    180
AAAGCAGTGC TCTGAGTATC ACATCACACA AAAGGAACAA AAGCGAAACA CACAAACCAG    240
CCTCAACTTA CACTTGTTA CTCAAAGAA CAAGAGTCAA TGGTACTTGT CCTAGCGTTT    300
CTCGAG                                         306
```

(2) INFORMATION FOR SEQ ID NO:1473:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 385 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

```
GAATTCGGCC TCATGGCCTA CAACTCCGCA GCAAACAAC CCGCAAACGG AAAAAGAACG    60
ACATGATGCA ATCTTCAGGA AAGTAAGAGG CATACTAAAT AAGCTTACTC CTGAAAAGTT    120
TGACAAGCTA TGCCTTGAGC TCCTCAATGT GGGTG TAGAG TCTAAACTCA TCCTTAAAGG    180
GGTCATACTG CTGATTGTGG ACAAAGCCCT AGAAGAGCCA AAGTATAGCT CACTGTATGC    240
TCAGCTATGT CTGCGATTGG CAGAAGATGC ACCAACTTT GATGGCCCAG CAGCAGAGGG    300
TCAACCAGGA CAGAAGCAA GCACCACATT CAGACGCCTC CTAATTTC AATTACAAGA    360
TGAATTTGAA AACCGAACGC TCGAG                                         385
```

(2) INFORMATION FOR SEQ ID NO:1474:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 428 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

```
GAATTCGGCC TTCATGGCCT AGATCCCCTT ATTTTGCCAA AAAGTGTCAT CAATTCATTT    60
GGATAACTTT TATGTTTTAG GAACGTGGCC TCTCTTTTAA TTACTGAGAA CTTACAAAAT    120
GGTTCAGAAA GTTTATATTT TTAAAGCTTT CATTCAATTGA TATATTGAAC ATCTAAGGCT    180
TAACTATCTT TCCACTGGGA CAAAACAGA ATTCTTAAAA ATGAGGAGGA GGGCCCAGTG    240
TGGTGGCTTA CACCTGGAAT TCCAGTGCTT TGGGAGTCCA AGGTAGGAGA ACTGCTTGAG    300
GCCAGGGGTT TGAGACCAGC CTGGGCAACA CAGCAAGACA ACTCTACAAA AAATTAAAAA    360
AACAAATCCAG GGCCGAGCAT AGTGGTTCAC ACCTGTAATC CCAGCACTTT AGGAGGCCAA    420
GCCTCGAG                                         428
```

(2) INFORMATION FOR SEQ ID NO:1475:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC	TTCATGGCCT	ACTGGGATGT	ATATGAGAGA	CAGTGCTTTC	AATTAAATCC	60
TTGGGTATAT	TTTTATTAAT	TTCCTCCAGA	TTTTTCTTTT	AAGGCCTTTT	CTAAGTTATA	120
CTGCATATCA	AACTTCCCTG	TTATTGAAGG	ATATAAGGTA	GAAGGTAAAA	GCCATTTTCC	180
TATAAGTAAC	TTGGGCATTT	GCAAAGATTT	TTCTCAAGTG	CAGTTGTAAC	TATACTAAAA	240
TATACTAATA	TTGTGTTATG	ATATACCTTG	CTTTTTTTCT	TTTATTTTTT	CTTTTGAGAC	300
AGAGTTTTGC	TCTTGTTTCC	CAGGCTGAAG	CGCTCGAG			338

(2) INFORMATION FOR SEQ ID NO:1476:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC	TTCATGGCCT	ACAAAGAGCT	AGAAGCCATT	GAAAGTCGGC	TAGAAAAGAC	60
AGAATTCACT	CTAAAAGAGG	ATTTAACTAA	ACTGAAAACA	TTAACTGTGA	TGTTTGTAGA	120
TGAACGGAAG	ACAATGAGTG	AAAAATTAA	GAAACTGAA	GATAAATTAC	AAGCTGCTTC	180
TTCTCAGCTT	CAAGTGGAGC	AAAATAAAGT	AACAACAGTT	ACTGAGAAGT	TAATTGAGGA	240
AACTAAAAGG	GCGCTCAAGT	CCAAAACCGA	TGTAGAAGAA	AAGATGTACA	GCGTAACCAA	300
GGAGAGAGAT	GATTTAAAAA	ACAAATTGAA	AGCGGCAGAA	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1477:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC	TTCATGGCCT	ACAGGTTTTT	ATTTTATATT	ATTTTCCTTT	AGCCTGAAAA	60
ATTTATTTAT	TTTTTCTCTT	AGTACAAGTC	TGCTGGTGGT	AAATTCTCTT	AGTTTTTGTG	120
TATTGAAAGA	TATTTTATTT	TTGCCTTCAT	TCCAGAAGGT	TGCTTTTGCT	GGATATAGGA	180
TTCTACAACT	TTTGCCTTTA	ACATGTTATG	GATGCCATTC	CTCTGTCTTT	TAGCTTCCAT	240
TGTTTCTGAT	GCTAAATCTT	CAGTCATTTT	ATCATTGATC	CTCTGTAATG	TACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1478:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 107 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

```
GCGAACTAGC CCAAATGCAC CTAGGAACAT TGTGCTTCA GGACCACTTA TTTCTGACCT    60
TCCAGTTGTT CCTGACTGTG AAGGGTGACC GCTTCCCGGG ACTCGAG    107
```

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 340 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

```
GAATTCGGCC TTCATGGCCT ACTTATATTC TTTATTATTA TTTAGTACAA AAATAGATTC    60
CCAGTAGATA TCCACAAGCA ATATTAGCAG GGCTTCTGTT TCTAAGTGAC CACAGACTAA    120
CCCTTTCTAG GCTTTAACAT TGTAATAAT CCTATAAACA GTTTGATTTT TTAAGATGAT    180
TTTTGATTTG AAGAGACAGG CTTTACATAA GCCTTCATTC CTTCAAAAGG TCCTGACAAA    240
ATACTTGGGT TTTTCTCTCT TTTTTCATT CTGGTATGCT TTGCAGCATT TCAGCTGCTT    300
TGGTGGGGAC ACAGATAACC CCTTCGCTTC CAGACTCGAG    340
```

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 233 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

```
GCGATTATTG TAAGTGACA ATTTATAATT GTATAAAAGT ATGAGGTACA AAGTGATGTT    60
ATAGCTTAAG AATACAGTAT GGTATGATTA AATCAAGTTA TTAACCTATC CTTACAGTTA    120
AATGCTTAAA TTTTGTGATG AGAACATTTG AAATTTACTC TTGGAAGGTA AAAAAAATC    180
TCAGGACCCC CCAAATTAAA GCCATGAAGC TGAATTGTGC AACATCCTC GAG    233
```

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 266 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

```

GAATTCGGCC TTCATGGCCT AGATAACTAT TGCTCCCAGT ACCCTTTCAG CTATCTCACA      60
TAACCTTTGAT ATATATTATT TTTATTATCG TTTATTAAGT GTCTAATTTC CATTGTGAAG      120
TCTCCTTGGA CCTATAAGGC TGAAATAAAA TAATTTAAAA TTTATTTTCT TATTGTTTCT      180
AATTCAATTT CATTATAGTT AATGCAAGTG GTCATTGTGC TATTGAGTTT GGTACTTTGG      240
AGGTTTCTTT TTCTGGCTAT CTCGAG                                           266

```

(2) INFORMATION FOR SEQ ID NO:1482:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

```

GAATTCGGCC TTCATGGCCT AAGAAATGTT CACTTTTCCA ACTTAAAAGG ATTTTAAAA      60
ATACAAACAT AATTGACCTA CTGGTTCAA AGAACAGAAG TGAGGAGAAC TTGCTTAAAG      120
TATTTGATGT TATATTTTCT CTGACTGAG TGCTTGAAAA AAAATTTTAT TGAACATATG      180
TTCTCCTTCC GTGGCTTTT TGTCTTGCT TTTTGTGTT GTTTGTGTT TTTTCTTT      240
GAGATGGAGT CTCACTCTCT GCTCGAG                                           267

```

(2) INFORMATION FOR SEQ ID NO:1483:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 242 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

```

GAATTCGGCC TTCATGGCCT AAATTAGCAT CTAGTGTAC AGGTAAAAGA ATTCAGGAC      60
CAGGTTTAAA CTTTATTTTA AATATTTTA TACTTAGGTC TCTTTTCCCT GCCTCTCCCC      120
AAAGAAGAGC CACTGGCCTT AGTTGTTTGA GCTTACTGCT TATATTATAG AGTGTAATA      180
GGTAACTAGA GACTAAAATT TTATTAACCA GCATGTTTGG TATATTTAA GCATTCTCG      240
AG                                           242

```

(2) INFORMATION FOR SEQ ID NO:1484:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

```

GAATTCGGCC TTCATGGCCT ACAGAGTGTG GTTCTGTAG CAACACTTCT CATGACCATC      60
TGTTTTGTGT TTATGATGAT TTTTCAGGT CTGTTGGTCA ATCTCACAAC CATTGCATCT      120
TGGCTGTGAT GGCTTCAGTA CTTCAGCATT CCACGATATG GATTACGGC TTTGCAGCAT      180
AATGAATTTT TGGGACAAAA CTCTGCCCA GGA CTCAATG CAACAGGAAA CAATCCTTGT      240
AACTATGCAA CATGTACTGG CGAAGAATAT TTGGTAAAGC AAGGGCTCGA G                                           291

```

(2) INFORMATION FOR SEQ ID NO:1485:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```
GAATTCGGCC TTCATGGCCT AGTAATTTT GATAGTAAGG GCTTTTTATT GTCATTTTTT      60
GTTAATCGTT TCCTGTCTGT TTTGTATTTT TTTTGTTCCT CTCTTCCTCG CTGGGTATCA      120
TCTTTGCAAT TTGATAATTT TTGTTGTGAT ATACTTTGAT TCTTTCTATT TATCTCTTCT      180
GAATCTAATA TTAGTTTTTT TTATCTTTTC TGTATCTATT ATTAGTTTTT TTTCTTTGTG      240
GTTATCATGA GGCTTCCACT CGAG                                         264
```

(2) INFORMATION FOR SEQ ID NO:1486:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```
GAATTCGGCC TTCATGGCCT ACCAGTGCCT TCCTCTTCCC TATATTCTGT GTGTCTTAAC      60
GGAATTATTT TTCCAAATCA TTGTGTGCAA AGAAACTAAT GACATCATAA GTATGATTTT      120
TGTACACATT TTAGTTGTAA TTGCTAGGTT TTCCAAGATT TCACAGTCAT CAAGTCATCT      180
GTTCCCAGAC ATCCCAACAA GTACTTATCA AGTGTCTCCA TCTGCTGCCT TCATCTCTCT      240
CAGGTGCCAT TCCAGTGACA TTGCTATAGC CTCTTGCTGT ACCCCCCTCG AG          292
```

(2) INFORMATION FOR SEQ ID NO:1487:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

```
GAATTCGGCC TTCATGGCCT AATGGATATA GAATTCCAGG TTGATAAACA TTTTCTGTCA      60
CAACTTTACA ACTGAAGGCA TTGCCCTTTT GTCTTTTACC GTTCATTTGA TAAAAAGTCT      120
GGTGGAATC TAATTCTTAC ACCTTTGTAG GTGAGCATT TTTCTTTCC TGTGACACAT      180
TTGTGATTAT CTGATCCTTA GAGATCTGAA GTTTTATCAT TTGTATCTAT GAGATCTTTT      240
CCCATCCTCC TGGTGCTCGA G                                         261
```

(2) INFORMATION FOR SEQ ID NO:1488:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 488 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	TTCATGGCCT	AATTTTCTGT	ATATTTTAC	ATGAATTTCA	GTACTATATT	60
GAACAGCTAT	GTTTAAGGAT	AATCAAAAGA	TGACTGTGAC	AGGGAGAATT	TGGAAATATT	120
AGCCCAAGTC	TAGTCAATTG	TGATTGTTGT	TGCGTTGGTA	CTAGTTTAAA	TTGGGGCTAA	180
ATTTAGAGCC	ACTGGGACTG	AGTACCTCGG	TTGATCTCCA	ATGATTCCAA	TTGCTAAAAA	240
GTAAAGGGCA	ACCACACATA	CGTACCAATT	CTGAAGTCCT	AGGAAATTTT	TAAAAGAATG	300
TAAGAGAATA	AGAAAATGTA	AAAGGGAGAA	GAGTTTATAT	GTCAATGACGT	AAGTTTTAGA	360
GTTATTTACT	TTGTAAGTGG	ACCTTCTCTG	CTTCTTCCAA	TGTGTTTCATT	AAGACCCTGC	420
TGAAAAATGA	CCTTCCAAC	CCCCTGAGTA	ATTATTTAAG	ACCCTTTCAT	CTTACCAACC	480
CTCTCGAG						488

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 238 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	TTCATGGCCT	AGTCTCAAAA	AAAAAATCAA	AATAAAAGTA	AAAGTAAGAA	60
GATGGAAATT	TGCTTAGCTG	TGAAAGGAAA	GGCGATCTGT	CTGATGTCCT	GTGTTTGGTG	120
CCTAGGTGGG	CTTGGTGCTT	GCATTTCTTG	CGTTGCAGTG	TCAGGATTTT	TCAGGGATCA	180
GCCTTGGCAC	TGGAGACCTT	CACATTTTCC	ATCTGGTTAC	TATGGCACAC	AACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 263 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTACTCT	GGAAGATATG	CTCTATGCTG	CTTCATCCAT	AAAGAGTAAT	TATTTGGTGT	60
TCATGGCGGA	ACTGTTCTGG	TGGTTTGAAG	TGGTGAAGCC	GTCTTTTGTA	CAGCCTCGTG	120
TTGTTCGTCC	ACAAGGAGCT	GAACCTGTAA	AAGATATGCC	TTCAATTCCT	GTCTTGAATG	180
CTGCCAAAAG	AAATGTCTTA	GATAGTAGTT	CTGACTTCCC	TTCAAGTGGG	GAAGGAGCTA	240
CATTACACA	GTCTCATCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCTC	ACACCTGGAT	TATCTCAGTA	GTTTCCCAAC	60
TGGTTTCCTT	GTTTCATTTC	TTGCCTCCTT	CTGTCTACTC	TCAATATAAC	AGCTAGAACA	120
ATCCTTTTAC	AATGGAATTC	AGATCATGTT	TACCCCTCTG	TTCAAATTCT	CCAGTGACTT	180
TCCAGTTTTT	ACATGATCTG	GCTCCTACTA	CCTGTCTCAC	TGTGTTTCCT	ACTACTCTCC	240
TGCCCTTTCT	CCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

GAATTAAAGA	GGGCGATATC	ATCACACTCA	CTAACCAAAT	TGATGAGAAC	TGGTATGAGG	60
GGATGCTGCA	TGGCCATTCA	GGCTTCTTCC	CCATCAATTA	TGTGGAAATT	CTGGTTGCCC	120
TGCCCCATTA	GGATGTTATG	CTGGCTGGCT	CGCCTCTCT	TGACCCAGAT	AGTTACGGTT	180
AACCACTGCT	TTGGCAATGC	TGCTTATAAC	ACATCCCAAG	TGCAGGCCGC	AGTGGTCCAC	240
GTCATCCAGC	CCCACCAAGT	GACTTTGGTT	GACTTGTGGG	CTCCACAGG	ACTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

GAATTCGGCC	TTCATGGCCT	AAAAAGAAAG	AAAAAGAAAA	GAAAAAACCT	TGGAGAAGTA	60
AGGGATTCTG	TAAAAAATTT	CCCCAATTTT	ACTAGAGAGA	TTGACATATA	AATTTAGAAA	120
ATTCAGATAA	CCTATGTAAG	ATGCTATGTA	AGACAACCAT	TGCAGAGACA	CAAAGTAATC	180
AGATTCTTGA	AGGTCAATGC	AAAAGAAAAA	AATATTAAAG	GCACTCGAG		229

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

GAATTCGGCC	TTCATCTGAC	AATTAAAAAC	ACTACCTTAG	TTTGTTTTTC	TGTAATTGAA	60
------------	------------	------------	------------	------------	------------	----

TTTGACAGT TCTATTTTAC TTGAATTAGT CTTTTTATAT ATATATAGGC AGAAGTACTT	120
AAATAAATCT TCCCTTAAGT ATCAAAAGCA AAAGAATAAC ATTCATAGAA GTCTAACATG	180
TTCAAAGTGT TAAATATACT ACAATTGTTC ATTCACATTA TAAATGCAGC TAAAATGACT	240
AACCTTTCAG ATCAACCCCT CGAG	264

(2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

GAATTCGGCC TTCATGGCCT ACCTTCCTTC CTTCTTCCTC TCCTTTCCTT CCTTTCCTCC	60
TTCCTTCCTT TCCTTCCTTT CTTTCCTTTC CTCTCTTCT CTCTTCTGT CATGGTCTGG	120
CTCTGTTACC CAGGCTGGAG TGCAGGGGTG CAATCTCAGC TCGCTGCAC TTCTTCCCCC	180
CCAACTCGAG	190

(2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

GGCCTTCATG GCCTACTAAG CTATTTGATT CTAAGTGAAT ATGTTATCTC TTATTAGAGG	60
ATATGTTAAT TTCCTGCAT TTTATTCATT TATTAAGTTA ACATCTCTGA TTGCCTACCA	120
TGTGTGAGGC TCTGTACTAA GGATTGAGGA CCCAAAGATG AACAAAACAT GGGGCCTAAT	180
TCAAAGATTT CACAACTGG AGAGAAAGTC AGCCACATAC AAAAGCCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTCTT GGTCTTGTG CTAGGATTTT	60
TTTTTTTTTT TGATTGCTGC TCCAGTGCC TTAAGTACTT TGACATTGGA GTTGACCACA	120
TGATGGTGTG CCACACTTCC CCTAGGCTCG AG	152

(2) INFORMATION FOR SEQ ID NO:1498:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 254 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

GCGATTGAAT TCTAGACCTG CCTCGATCTC TTGTATTGAG TATTTTGTGG GGGAGGTACT	60
TTGAAACTGT GTAAATATAC CATTCTCAT TAACTTTTC AATTATATCC CTTATTTAGA	120
TGCGTATGAA CTCATGGCTT CTTGTTTAT TTGATGGATC CAAATCTGTT AATATCCTTA	180
CTGATTTGGA TGCTCAGACT GCCCCAGATT TGGCCAGTGG AAGCCCTTTC AGGCTTGCTC	240
CCATGTCCCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 658 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

GAATTCGGCC TTTCATGGCC TAGAGAGCGC GGTGGGCTGC CATTAAACG CGGCCATCGG	60
TCCGGCCATC ATCCCCTTCA CGGTACTAGA CTCCGGGATG GTGAGATCCT TCTCATCCTT	120
TGGGGGCCGA CCCCGCTTCC GGGGACTTTG CTCTTGGGCT CTTTTCAGAG GGGATTTGGA	180
GCCTCTCTCT GAAGAGCCTG AAGACACCCT CTTCTTTCCT TCTCCCATGT TCTTCTTCAC	240
CTTCCCTTCA GACAGGCTAA GTTTGCGCTT CTCATCACCT GAGTTTGGCC TACTTCTCTC	300
CTCACTGGAA TTACGTCGAT TCTTGTCATC AGAAGAATTG TGGGATGACG TCTGGTCTTT	360
CCCTTTGGCT CTCCTGTAGG CCATGAAGGC CCGGCCTTCA TGGCCTACCA TTTCTTACAC	420
ACACTGCCAG AGATACTCTA GGCATGTAAA GCACAAACAT ACATATAAAA TCTGCGGGCT	480
TCAAAAAATA TAAGTAGGAT GTCATCTATA CTGTCATACA CTTTGTTTTT TATCACTTAC	540
TTAATGTTAT ATCTTGGATA TTGTATTACC CTGGGTATTA AAAAGAACTC CTTTCACATT	600
TTAAATAAAC AATCTGAGCA CTTCATAAAT CCAAATGCGT ATCTCCAGTC TGCTCGAG	658

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCTAGA CCTGTCTCGA GAAACCAGAG GACTTTTCTG CTTTGTGTTT TCTTTTAGGA	60
GGTAATAAAA CCGTGAATTT ATTTAAATGC TAATGTGTAG GATCTCACTC GAG	113

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ

ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID

NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID NO:274, SEQ ID NO:275, SEQ ID NO:276, SEQ ID NO:277, SEQ ID NO:278, SEQ ID NO:279, SEQ ID NO:280, SEQ ID NO:281, SEQ ID NO:282, SEQ ID NO:283, SEQ ID NO:284, SEQ ID NO:285, SEQ ID NO:286, SEQ ID NO:287, SEQ ID NO:288, SEQ ID NO:289, SEQ ID NO:290, SEQ ID NO:291, SEQ ID NO:292, SEQ ID NO:293, SEQ ID NO:294, SEQ ID NO:295, SEQ ID NO:296, SEQ ID NO:297, SEQ ID NO:298, SEQ ID NO:299, SEQ ID NO:300, SEQ ID NO:301, SEQ ID NO:302, SEQ ID NO:303, SEQ ID NO:304, SEQ ID NO:305, SEQ ID NO:306, SEQ ID NO:307, SEQ ID NO:308, SEQ ID NO:309, SEQ ID NO:310, SEQ ID NO:311, SEQ ID NO:312, SEQ ID NO:313, SEQ ID NO:314, SEQ ID NO:315, SEQ ID NO:316, SEQ ID NO:317, SEQ ID NO:318, SEQ ID NO:319, SEQ ID NO:320, SEQ ID NO:321, SEQ ID NO:322, SEQ ID NO:323, SEQ ID NO:324, SEQ ID NO:325, SEQ ID NO:326, SEQ ID NO:327, SEQ ID NO:328, SEQ ID NO:329, SEQ ID

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NO:1417, SEQ ID NO:1418, SEQ ID NO:1419, SEQ ID NO:1420, SEQ ID
NO:1421, SEQ ID NO:1422, SEQ ID NO:1423, SEQ ID NO:1424, SEQ ID
NO:1425, SEQ ID NO:1426, SEQ ID NO:1427, SEQ ID NO:1428, SEQ ID
NO:1429, SEQ ID NO:1430, SEQ ID NO:1431, SEQ ID NO:1432, SEQ ID
NO:1433, SEQ ID NO:1434, SEQ ID NO:1435, SEQ ID NO:1436, SEQ ID
NO:1437, SEQ ID NO:1438, SEQ ID NO:1439, SEQ ID NO:1440, SEQ ID
NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID
NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID
NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID
NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID
NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID
NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID
NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID
NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID
NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID
NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID
NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID
NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID

NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;
or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification: C12N 15/12, 5/10, C07K 14/47, C12Q 1/68, A61K 38/17	A3	(11) International Publication Number: WO 98/45435 (43) International Publication Date: 15 October 1998 (15.10.98)
(21) International Application Number: PCT/US98/06954 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/835,913 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 12 November 1998 (12.11.98)
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs) (57) Abstract <p>Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/JS 98/06954

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C12N5/10 C07K14/47 C12Q1/68 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 07198 A (GENETICS INSTITUT) 27 February 1997 see the whole document ---	1-8
A	WO 97 04097 A (GENETICS INST) 6 February 1997 ---	1-8
A	ADAMS M D ET AL: "3,400 NEW EXPRESSED SEQUENCE TAGS IDENTIFY DIVERSITY OF TRANSCRIPTS IN HUMAN BRAIN" NATURE GENETICS, vol. 4, no. 3, July 1993, pages 256-267, XP000611495 see the whole document --- -/--	1-8



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

3 July 1998

Date of mailing of the international search report

3 0. 09. 98

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INTERNATIONAL SEARCH REPORT

International Application No
PCT, JS 98/06954

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 cited in the application see the whole document	1-8
A	--- JACOBS K ET AL: "A NOVEL METHOD FOR ISOLATING EUKARYOTIC CDNA CLONES ENCODING SECRETED PROTEINS" JOURNAL OF CELLULAR BIOCHEMISTRY - SUPPLEMENT, vol. 21A, 10 March 1995, page 19 XP002027246 see abstract	1-8
A	--- WO 90 14432 A (GENETICS INST) 29 November 1990 see the whole document	1-8
A	--- WO 96 17925 A (IMMUNEX CORP) 13 June 1996 see the whole document -----	1-8

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 06954

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see further information sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see further information sheet, subject 1.

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1. Claims: (1-8) partially

An isolated polynucleotide comprising a nucleotide sequence selected from SEQ ID no.1, consisting of a nucleotide sequence selected from SEQ ID no.1, consisting essentially of a nucleotide sequence selected from SEQ ID no.1; an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence consisting of SEQ ID no.1; an isolated protein encoded by said isolated polynucleotides;

Inventions 2 to 1500. Claims: (1-8) partially

Idem as subject 1 but limited to SEQ ID nos.2 to 1500 respectively clone ID nos. B11 to BV29. (Invention 2 is limited to SEQ ID. no. 2; Invention 3 is limited to SEQ ID no. 3;.....Invention 1500 is limited to SEQ ID no. 1500);

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT, JS 98/06954

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9707198 A	27-02-97	US 5707829 A AU 6712396 A AU 6768596 A EP 0839196 A EP 0851875 A WO 9704097 A	13-01-98 18-02-97 12-03-97 06-05-98 08-07-98 06-02-97
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WO 9617925 A	13-06-96	AU 4639396 A CA 2206488 A FI 972390 A NO 972455 A	26-06-96 13-06-96 05-06-97 06-08-97

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